VOLUME XI
No. 9

GOVERNMENT OF NORTHERN IRELAND
MINISTRY OF AGRICULTURE

MONTHLY REPORT

JANUARY, 1937

IMPERIAL MYCOLOGICAL
25 JAN 1937
INSTITUTE

PRINTED UNDER THE AUTHORITY OF HIS MAJESTY'S STATIONERY OFFICE
BY BELL & LOGAN, LTD., BELFAST

GOVERNMENT OF NORTHERN IRELAND
MINISTRY OF AGRICULTURE

MONTHLY REPORT

January, 1937

VOLUME XI No. 9

CONTENTS

PAGE

AGRICULTURAL CONDITIONS:—

THE CROPS, SUPPLIES AND PRICES 3
LIVE STOCK 5
THE COST OF LIVING INDEX FIGURE 6
THE MARKETS DURING DECEMBER 6

ARTICLES:—

Pig Prices in 1937 8
Origin and Spelling of the word "Mutter" used in Northern Ireland ... 10

MARKETING SCHEMES:—

Agricultural Marketing (Pig Industry) Act (N.I.), 1934:—

PIG PRICES FOR JANUARY, 1937 11
COST OF STANDARD PIG RATION 13
GRADING STATISTICS 14
PIGS MARKETING (GRADING) (NORTHERN IRELAND) ORDER, 1936 15
TRANSIT OF CARCASES (NORTHERN IRELAND) ORDER, 1936 16

Butter and Cream Marketing Scheme (Northern Ireland), 1936—

ELECTION OF BOARD, 1937 16

The Cattle Industry (Emergency Provisions) Acts, 1934 and 1935 17

AGRICULTURAL NOTES:—

SEASONAL FARM NOTES 20
SEASONAL LIVESTOCK NOTES 22
SEASONAL GARDEN AND ORCHARD NOTES 24
SEASONAL POULTRY-KEEPING NOTES 26
AUTUMN WHEAT VARIETY TRIALS 28

PAGE

ANNOUNCEMENTS AND REMINDERS:—

GENERAL 30
LECTURES AND CLASSES 31
BROADCAST TALK 32
NAMES AND ADDRESSES OF INSTRUCTORS EMPLOYED BY COUNTY AGRICULTURAL COMMITTEES 32
SCHOOL NEWS 33
FORESTRY—SCHEME FOR SUPPLYING YOUNG TREES AT REDUCED PRICES TO FARMERS 35
MILK PROSECUTIONS 36
FIFTEENTH EGG-LAYING TEST AT STORMONT 36

AGRICULTURAL PRICES:—

FEEDING STUFFS 40
FERTILIZERS 42
FAT STOCK AT BELFAST AUCTION MARTS 43
LIVE STOCK AT FAIRS 44

AGRICULTURAL TRADE RETURNS:—

IMPORTS AND EXPORTS OF AGRICULTURAL PRODUCTS 45
SHIPMENTS OF LIVE STOCK FROM NORTHERN IRELAND PORTS 46
NUMBERS OF CATTLE AND ACCOUNT OF TRADE AT FAIRS 47

MINISTRY OF AGRICULTURE

MONTHLY REPORT

JANUARY, 1937.

Dip down upon the Northern shore,
O sweet new-year delaying long;
Thou doest expectant nature wrong;
Delaying long, delay no more.

This winter season has, so far, closely resembled the previous one, and in fact provided even fewer opportunities for tillage operations than were possible during the corresponding months of 1935. Such seasonal work as the sowing of autumn varieties of wheat has been held up, and is as much—if not more—in arrear as at this time last year. It is, however, not intended to commence the year with gloomy forebodings; rather let it be hoped that weather conditions will improve soon and allow field work to proceed on its normal course. Farmers will now be giving some consideration to the extent of the area to be sown under the various crops this year, and due regard will naturally be paid to the financial results, so far obtained, from last year's crops. Crop prices on the whole were satisfactory last quarter, but another important point that will not be overlooked is that following the harvest last year, which was not one of the best, prices of concentrated foodstuffs continued to advance, and have become a serious problem to many stock owners. In the circumstances, it may seem desirable to many farmers to counteract this by increasing the area under crops to be grown this season for the production of home-produced food-stuffs.

The special article in this issue, promised in December, relating to the fixing of pig prices for 1937, is to be found on page 8.

It is regretted that the account of the provisions of the new trade agreement with Argentina, affecting agriculture, promised last month, has had to be held over to the next issue.

AGRICULTURAL CONDITIONS.

AGRICULTURAL CONDITIONS AT 1st JANUARY, 1937.

The weather of the past month was mostly wet and cold, and in keeping with the very damp conditions which generally marked the year just ended. None the less, December was not an unduly harsh month, and the mild and dry period during Christmas week was rather unusual for the time of the year. The month opened cold and frosty, and much rain fell during the first three weeks, particularly during the third week, when wild and squally conditions were general. Then followed a comparatively calm spell of fine open weather with high temperatures in the fourth week. During the last few days of the year more unsettled weather prevailed. In the earlier part frosts were fairly common, and there were showers of sleet and snow, whilst fogs were experienced on a few occasions.

The wet conditions retarded field work further, but the drier weather in the second half of the month permitted ploughing, particularly of leas, to be pushed forward in some areas. This work has been generally well advanced, but the effects of continued wet weather on heavy soils have delayed the commencement of these operations.

Pasture lands have deteriorated, although they appear fresh and green in many districts as the result of the mild spell. They are generally in a sodden state, and providing but little keep for stock. Flooding also is reported to be fairly common in parts of the country. The treatment of grass lands with phosphatic manures was delayed by the weather, and comparatively small progress was made with this work. There is, however, good evidence that more farmers are beginning to appreciate the results which are obtainable from this work, and have only deferred action until drier conditions prevail.

Supplies of home-grown food stuffs are fairly plentiful on most farms, but the quality in many cases is below the usual standard. Purchased food stuffs for live stock are in fairly good supply, at advanced prices. Outlying store cattle suffered from the effects of the weather, but the hand-feeding of the animals continued on a fairly large scale, and, generally speaking, the health and condition of the herds is satisfactory. The number of stores being fed for beef is reported to have decreased in comparison with previous years. This is attributed to the fact that forward stores are selling at relatively high prices, and another reason is that supplies of good quality home-grown foods are limited this season, whilst purchased feeding stuffs are very dear.

Sheep also are in a fairly healthy state. Foot rot is more or less widespread on account of the very wet season, and dosing and treatment for fluke is fairly general in some areas.

THE CROPS.

WHEAT.—Good progress was made with the threshing of this crop, and this work is nearing completion. Yields have been satisfactory as regards quantity, but the quality of both the grain and straw suffered from the weather at harvesting, and can be generally described as only medium. The sales of small quantities of grain to registered merchants during last month were effected at prices ranging from 8/- to 10/- per cwt. Reports of progress with the work of sowing autumn varieties of wheat differ according to district, but there is little doubt that on the whole it was considerably hampered by the inclement weather, and much remains to be done if the area under this crop is not to suffer a further serious reduction this season. In this respect, however, it is encouraging to learn that enquiries for seed have been larger than for previous seasons, and the expectations are that there may be an increase in the area sown this year if weather conditions improve soon.

OATS.—The threshing of this crop proceeded during the periods of suitable weather, and a fair portion of the work was done last month. The yields of grain and of straw were variable—disappointing in some areas—although generally satisfactory both as regards quality and quantity.

Slightly larger supplies of white oats were marketed last month than in November, and prices, which had a steady upward tendency throughout, averaged 5/8½ per cwt., an increase of 1d. on the month.

BARLEY.—Most of this crop has been threshed, and the grain is generally of good quality. Only small lots were sold last month at prices ranging from 8/- to 8/6 per cwt., the greater bulk of the crop being retained for consumption on the farm.

FLAX.—The scutching of flax continued on a fairly large scale during December. The yields have been rather less satisfactory than usual both in regard to the quality and bulk of the fibre, more particularly from heavy crops which suffered damage from "lodging and twisting". It was also learned that the white flowering varieties of flax have given very disappointing results in contrast to the blue-flowering pure strain varieties, which have cropped moderately well generally.

Much larger supplies of flax were marketed during December than in the month previously, and prices were generally firmer, and averaged 9/4½ per stone compared with 9/- per stone during November.

POTATOES.—Many complaints have been received of the keeping qualities of the tubers, especially among the white varieties, owing to the prevalence of blight and the wet conditions up to lifting time. Some rotting also has occurred in pits, but in houses potatoes are keeping rather better, and very little sprouting has been noticeable as yet. Some difficulties have been experienced in raising potatoes from the pits owing to the sodden state of the ground, but shippers' demands have been fairly well met up to the present. During last month the demand for potatoes for shipment was quietly steady, and smaller supplies were purchased for shipment than in November and during the corresponding period a year ago.

The following were the quantities inspected weekly for shipment to Great Britain during December last, compared with those of a year ago.

Week ended		1936 Tons	1935 Tons
5th December	..	5,911	6,452
12th do.	..	4,526	6,134
19th do.	..	4,092	7,552
26th do.	..	3,091	5,646
2nd January	..	3,939	6,094

The prices paid by shipping merchants eased throughout December, but since the commencement of the new year they have recovered slightly, and for the week ended 9th January ranged as follow:—

		Bagged.	Loose.
Up-to-Date (Red Soil)	per ton	£4-0-0 to £4-5-0	£3-10-0 to £4-0-0
Up-to-Date (Grey Soil)	„	£3-15-0 to £4-2-6	£3-10-0
Arran Consul	„	£4-0-0 to £4-5-0	£3-10-0 to £3-15-0
Arran Victory	„	£3-10-0 to £4-7-6	£3-5-0 to £3-15-0
Arran Banner	„	£3-10-0 to £4-2-6	£3-10-0 to £3-15-0
Kerr's Pink	„	£3-15-0 to £4-7-6	

During last month the supplies marketed for local consumption were slightly smaller than for the previous month, and during the corresponding month a year ago. Prices generally were firmer on the month, averaging 3/11¼ per cwt., as against 3/7½ per cwt. for November.

The following were the average prices per cwt. at local markets during the past six weeks, compared with the corresponding periods a year ago:—

Week ended		s. d.		s. d.
5th December, 1936	..	4 0	corresponding week, 1935	3 0
12th „ „	..	3 11	„ „ „	3 6½
19th „ „	..	3 11	„ „ „	3 9
26th „ „	..	3 9½	„ „ „	4 2
2nd January, 1937	..	4 0	„ „ 1936	4 0
9th „ „		4 0¾	„ „ „	4 0

MANGELS.—The yield has been light in many districts, but supplies are generally regarded as sufficient for requirements, and the roots are stated to be keeping satisfactorily.

TURNIPS.—This very variable crop is keeping fairly well, and, whilst rotting at the crown is reported to be prevalent in some heavy soil areas, this defect is rather less widespread than a year ago. Although supplies of turnips on many farms will be a shade lighter than usual no fears have been expressed as to the likelihood of a shortage.

HAY.—The threshing of seed hay has been completed, and the quality of the seed has given general satisfaction. Although the quality of both Upland and Meadow hay is less satisfactory than usual, supplies on most farms are considered fully sufficient for requirements.

Larger quantities were marketed last month than in November, and first and second year's (Upland) hay was 1/- dearer at an average price of 68/10½ per ton, whilst Meadow hay cheapened by 6d. per ton to 44/10½.

Considerably decreased supplies of grass-seeds fetched dearer rates than in November, Italian rising by 10¼d. to an average price of 10/6¾, Perennial by 6¾d. to 15/9¼, and Mixed seed by 9½d. to 10/3 per cwt. The smaller quantity of Crested Dogstail marketed at Ballynahinch declined in value from an average of 67/1 per cwt. for November, to 61/1½ per cwt. for December.

LIVE STOCK.

Store cattle have been maintained in good average condition, and the bill of health is comparatively clean. Outlying cattle suffered to some extent from the weather, particularly those which were not hand-fed, but most cattle made a fair thrive during the month. Hoose remained troublesome among calves in a few districts.

Medium-sized offerings of stores at fairs last month met a fairly steady trade, and recent good prices were firmly held. It is suggested that stall-feeding for beef is not being done on as large a scale as usual, as some owners maintain it is not profitable, having regard to the relatively high prices ruling for forward stores and the dearness of purchased food stuffs.

The reports concerning the health and condition of dairy herds continue to be satisfactory, and although the milk yield is reported to be adversely affected in some areas, it is generally normal for the time of the year. Calving proceeded without any unusual incidents during the month. Rather smaller supplies of dairy cattle were shown at fairs last month where trade for the best sorts was steady at fully late rates up to the holidays, since when conditions have been quieter and prices have tended to ease.

SHEEP.—The condition of sheep is generally fair. Liver fluke disease has been held fairly well in check, but foot rot is a common complaint throughout the country.

Small supplies, mostly of fats and stores, were a steady trade during December at firm prices.

PIGS.—Plentiful supplies of young pigs were in steady request last month, and prices were generally maintained at recent levels. Sows for breeding were in fair numbers, and those of the best type were in good demand at prices ranging from £7 to £12 per head.

HORSES.—Trade continued keen during December, and young foals were selling at unchanged prices which generally ranged from £15 to £25 per head, and in some instances up to £35 each, whilst colts made from £25 to £30 each. Good young farm horses were fetching from £35 to £55 each, and useful workers between £20 and £40 each.

MILK.—The milk yield recorded a seasonal decline, and smaller supplies were available to creameries who paid prices ranging from 4d. to 5½d. per gallon for milk delivered, the separated milk being returned to the farmer.

The average price paid for milk produced in Northern Ireland and delivered to creameries for manufacturing purposes was 4.94d. per gallon for the month of November, 1936, and equalisation payments have been made at the rate of 1.06d. per gallon in order to bring the average price in respect of this month to 6d. per gallon, as provided by the Milk and Milk Products Act (Northern Ireland), 1934.

It should be noted that under the regulations creameries are required to distribute equalisation payments in accordance with the butter fat contents of the milk received from each supplier. Farmers should, therefore, bear in mind that the actual payments made to them, being calculated on a butter fat basis, may be at a rate per gallon which may vary below or above the average figure quoted.

THE COST OF LIVING INDEX FIGURE.

The cost of living index figure at 1st December, 1936, was 51, or the same as that for the previous month. At 1st December, 1935, the figure was 47.

THE MARKETS DURING DECEMBER.

Supplies of the principal vegetables marketed during December were larger than in the preceding month, and average prices differed but slightly. Cabbage were ¾d. dearer at 1/4d. per dozen, savoys 1¾d. cheaper at 1/4½d. per dozen, and cauliflowers were selling at late rates at 2/4d. per dozen. At

Belfast and Portadown markets only, leeks and parsley were ½d. and 1d. dearer respectively at 4¼d. per bunch, while carrots, parsnips and garden turnips were 1d. cheaper on the month. Carrots were selling at 4/1½d. per cwt., parsnips at 3/11d. per cwt., and garden turnips at 1/11½d. per cwt.

Farmers' butter was marketed in larger quantities than a month ago, and whilst print butter was unchanged in price at 1/2¼d. per lb., lump butter was ¼d. dearer at 11½d. per lb. Larger supplies of eggs were marketed than in November. Hen eggs were 2d. cheaper at 11¾d. per lb. during December, while duck eggs increased in price on the month from 14/9½d. to 14/11d. per 120. There were seasonal increases in the numbers of hens, chickens and ducks marketed, and prices were firmer. Hens were 2¼d. dearer at 1/9¾d. each, chickens 5d. dearer at 2/5½d. each, and ducks 3½d. dearer at 2/4¼d. each. Decreased supplies of wool were marketed in December, and whilst long unwashed wool was ½d. dearer at 8¼d. per lb., mountain unwashed wool was unaltered in price at 7¼d. per lb.

The Christmas poultry trade was on the whole less satisfactory than a year ago. At the opening markets in Northern Ireland prices ruled higher, but the volume of trade was smaller than in 1935. With the arrival of supplies of turkeys in increasing numbers towards Christmas, prices fell steadily and finished below those ruling in 1935, as the following prices per lb. (live weight) at local markets indicate; on the other hand prices for geese improved to some extent.

Turkeys.

	1936	1935
5th December ..	1/2 to 1/4	11d. to 1/1
12th ,, ..	1/- to 1/4	11d. to 1/4
19th ,, ..	9d. to 1/3	1/- to 1/5
26th ,, ..	9d. to 1/2	1/- to 1/3

Geese.

5th December ..	4d. to 5d.	4d. to 4½d.
12th ,, ..	4d. to 5½d.	4d. to 7d.
19th ,, ..	4d. to 7d.	4½d. to 7d.
26th ,, ..	4d. to 7d.	5d. to 8d.

It will be seen from the following table showing the imports of turkeys (dead) into the United Kingdom during the month of December, 1936, with comparative figures for the corresponding period in 1935, that the arrivals just before Christmas last were heavier than a year ago, and this fact accounted for the cheapening of prices at cross-Channel centres immediately before Christmas.

Week ended	1936	1935
	cwt.	cwt.
2nd December ..	12,108	14,757
9th ,, ..	11,611	14,421
16th ,, ..	35,556	19,148
23rd ,, ..	73,698	61,551

PIG PRICES IN 1937.

The Pig Industry Council for Northern Ireland, which is the statutory body entrusted with the duty of fixing pig prices, subject to the approval of the Ministry of Agriculture, has had under consideration for some time the price fixing formula to be adopted for the year 1937.

Our readers are doubtless aware that during last year the position was, briefly, that the price of the standard pig (a pig of Grade B weighing from c.1.1.14 to c.1.3.14) was determined by reference to a formula which took into account the price of (a) bacon and hams; (b) fresh meats; and (c) the cost of a standard feeding stuffs ration. Heavier pigs suffered cuts in price, while a premium of 5/- per cwt. dead weight was fixed for pigs weighing c.1.0.14 to c.1.2.7 dead weight which were sold alive on direct contract, and were suitable for Wiltshire cure. Thus for the month of December, 1936, the price of a Grade B pig weighing c.1.1.14 to c.1.3.14 was 60/8d. per dead cwt., while the price of a Grade 2 pig sold alive under direct contract to a Wiltshire bacon curer and weighing c.1.0.14 to c.1.2.7 dead weight was 65/8d. per dead cwt.

The Council, after consideration, was satisfied that a revised method of price-fixing should apply in 1937, and proposed early in December that, with the approval of the Ministry of Agriculture, the prices to be paid to producers in Northern Ireland for pigs sold during 1937 should be based in accordance with what is known as the Greig Award for pigs sold under contract to curers in Great Britain. The Greig Award related pig prices to the price of a standard feeding stuffs ration with an upward limit in the cost of the ration of 9/- per cwt. In order that the Award might apply in Great Britain it was necessary that 2,200,000 pigs should be contracted for by producers in Great Britain for the year 1937. Unfortunately the contracts made did not cover this number of pigs and, as a consequence the price-fixing arrangements in Great Britain have, for the moment, broken down.

The Council decided, with the concurrence of the Ministry, that there was no necessity for, and, in fact, it was most inadvisable that there should be any departure from the policy adopted in this country of ensuring fixed prices and encouraging regular marketings of pigs. It was determined that in the circumstances prices and terms of sale should be prescribed for the month of January, 1937, and that during that month the position should be reviewed in order to consider measures to be applied during the period February to December, 1937. It may be mentioned that the Council and the Ministry have agreed that it is desirable that prices in Northern Ireland should be regulated without direct reference to the course of events in Great Britain.

It has been decided, therefore, to institute a system of prices for Northern Ireland based solely upon the conditions prevailing here, and without reference to prices in Great Britain.

A statement appears on page 11 setting out the prices which apply during the month of January, 1937. These are the prices which would have applied during January if the contract system had not broken down in Great Britain. It will be noted that the weight ranges have been altered from the previous year. The basic price for pigs sold dead is 67/5d. and applies to pig carcases from c.1.2.4 to c.1.3.14. In the case of pigs weighing from c.1.0.21 to c.1.2.3 dead weight, it is more profitable for the producer to sell such pigs alive than to sell them dead if the pigs sold alive are sold on direct contract to Wiltshire curers, or are sold to the Pigs Marketing Board for resale to Wiltshire curers.

In the case of pigs sold alive either to Wiltshire curers on direct contract, or to the Pigs Marketing Board, and re-sold to Wiltshire curers in Northern Ireland, producers receive a basic price of 73/5d. per dead cwt. This price includes a special inducement of 2/- per cwt. In the case of pigs between c.1.0.21 and c.1.2.3 sold dead the basic price to the producer is 67/5d. per dead cwt., but curers purchasing such pigs actually pay for them at the rate of 71/5d. per cwt., that is, exactly the same price per dead cwt. as that paid by Wiltshire curers for pigs of the same dead weight and grade. The difference of 4/- per dead cwt. in respect of pigs purchased dead is paid by curers through the Ministry to the Pigs Marketing Board, and is used for the payment of the special inducement of 2/- per cwt. included in the price received by producers for pigs of corresponding weights sold alive for Wiltshire curing. The reason for this difference in the price per cwt. to the producer in the case of pigs weighing between c.1.0.21 and c.1.2.3 dead weight according to whether the pigs are sold to a Wiltshire curer or to a roll and ham curer is because the percentage loss in killing is about 5 or 6 per cent. greater in the case of abattoir-killed pigs than in that of farm-killed pigs. As a consequence a price of 67/5d. per cwt. for farm-killed pigs is broadly equivalent to 71/5d. per cwt. for abattoir-killed pigs.

A statement dealing with the revised system of grading, which came into force on 1st January, 1937, appears on page 15.

"MUTTER."

In some parts of Northern Ireland it is the custom for farmers to take wheat which they have grown to a mill to be ground into meal, which they then take home again. The miller retains portion of the meal, or is paid in cash, in return for his work in grinding. The wheat is not sold but remains the property of the grower throughout. This practice is known as "mutter", and the following note which the Wheat Commission, London, have kindly supplied to the Ministry in regard to the origin and spelling of the word "Mutter" should be of interest not only to growers and millers of wheat but also to farmers generally :—

Some time ago enquiries were made in Northern Ireland, and the Commission were informed that "mutare" was the correct spelling of the word which is pronounced "mutter" and is used to describe the custom by which a North Irish miller retains part of the meal which he grinds for a farmer from the farmer's own wheat.

In a letter of the 10th November, 1936, a miller in County Down wrote— " We never did and never will mill any wheat for 'mutare' or 'mutter' or 'mulcture' (which latter is the correct word)."

Reference has been made to "mulcture" in the Oxford English Dictionary. The following extracts are relevant :—

Multure (substantive). There are many other forms including mooter and mu'ter. Origin, old French, molture ; modern French, mouture :— from Latin molere "to grind". The form "mulcture" is due to association with mulct. (Mulct : to punish with a fine).

The principal meanings are :—

(a) A toll consisting of a proportion of the grain carried or of the flour made paid to the proprietor or tenant of a mill for the privilege of having corn ground at it.

(b) The right to exact this toll.

The word is used in the following combinations :—

Multure-ark : chest in which multure corn or meal is kept.

Multure-corn : corn taken in payment of multure.

Multure-dish : dish used for measuring out multure corn or meal.

Multure-grave : the steward who is responsible for seeing that multure has been paid.

Multure-meal : as in (a).

Multure-oath : an oath to the effect that multure has been paid.

Quotations are given in the Dictionary from the year 1300 up to the year 1851. In that year the following sentence occurs in the Journal of the Royal Agricultural Society of England XII.I.132:—

> "When farmers get oats made into meal for the use of their families and servants, the miller retains as multure 8¾ lbs. (a Scotch peck) for every boll (140 lbs.) of meal produced".

From the above extracts there appears to be no doubt that official references to the custom should describe it as "multure". The spelling "mutare" may come from corrupt forms of the word "multurer". A multurer is defined in the Oxford English Dictionary as one who pays toll for the grinding of his corn at a mill. Alternative forms of the word are "multarar", "multrar", "multerair".

MARKETING SCHEMES.

AGRICULTURAL MARKETING (PIG INDUSTRY) ACT (N.I.), 1934:—

PIG PRICES FOR JANUARY, 1937.

The Pig Industry Council for Northern Ireland have announced the following prices for dead pigs sold by producers to curers in Northern Ireland in January, 1937.

Weight Class. (Dead Weight).	Grade 1.	Grade 2.	Grade 3.		Partly Black pigs.
Under c.1.0.21	59/5	59/5	59/5		59/5
c.1.0.21 to c.1.2.3 ..	70/5	67/5	64/5		5/- below relevant Grade Price.
Weight Class. (Dead Weight.)	Grade A.	Grade B.	Grade C.	U.L. or U.F.	
c.1.2.4 to c.1.2.14 ..	68/5	65/5	62/5	59/5	
c.1.2.15 to c.1.3.14	68/5	65/5	62/5	59/5	
c.1.3.15 to c.2.0.0 ..	65/5	62/5	59/5	56/5	
c.2.0.1 to c.2.0.14 ..	59/5	56/5	53/5	50/5	

U.L.—Under Grade A. measurements. U.F.—Over Grade C. measurements.

Authorised cuts :—

(a) Broken ham (dry, shank and/or shell bone break)—5% of the gross value of the carcase.

(b) Broken ham (wet break)—12½% of the gross value of the carcase.

(c) Shoulder-stuck carcase—3/- per shoulder affected.

The gross value of a carcase is the product of the dead weight and the relevant grade or other price per cwt.

Where portion of a pig carcase weighing not more than c.2.0.14 is condemned and the existence of disease could not reasonably have been known to the producer before despatch to the curer the appropriate grade price shall apply. If the carcase is wholly condemned on account of disease, the existence of which could not reasonably have been known to the producer before despatch to the curer, the relevant Grade 2 or Grade B price shall apply.

The foregoing prices do not apply in the case of (a) wholly black pigs, boars, rigs or stags, sucked sows, and pig carcases weighing over c.2.0.14, and (b) pigs visibly diagnosable as diseased before despatch by the producer and subsequently condemned; emaciated or screw pigs; smelling pig carcases with definite indications of putrefaction, and pig carcases badly abused or damaged before being handed over by the producer to the curer.

Prices for Wiltshire Pigs Sold on Direct Contract.

In the case of pigs sold alive under direct contract to Wiltshire curers the prices per dead cwt. payable for pigs delivered in respect of the month of January, 1937, will be as follows :—

Weight Class. (Dead Weight.)	Grade 1.	Grade 2.	Grade 3.	Unsuitable.
Under c.1.0.21 ..	63/5	63/5	63/5	61/5
c.1.0.21 to c.1.2.3 ..	76/5	73/5	70/5	63/5
c.1.2.4 to c.1.2.7 ..	Grade A. 71/5	Grade B. 68/5	Grade C. 65/5	U.L. or U.F. 62/5
Over c.1.2.7 ..	On the same basis as pigs sold dead (See above).			

Prices for Live Pigs Sold to the Pigs Marketing Board (Northern Ireland).

(a) In the case of pigs sold alive to the Pigs Marketing Board during January, 1937, and resold to Wiltshire curers in Northern Ireland, the prices, according to carcase grade, will be as follows :—

Live Weight.	Grade 1.	Grade 2.	Grade 3.	Unsuitable.
Under c.1.2.9 ..	47/6	47/6	47/6	46/–
c.1.2.9 to c.2.0.4 ..	57/3	55/–	52/9	47/6

(b) In the case of pigs sold alive to the Pigs Marketing Board during January, 1937, and not disposed of to Wiltshire curers, the prices per live cwt., according to live pig grading, will be as follows:—

Live Weight.	Grade 1.	Grade II.	Grade III.	Unsuitable.
Under c.1.2.9 ..	44/6	44/6	44/6	42/3
c.1.2.9 to c.2.0.4 ..	52/9	50/6	48/3	46/–
c.2.0.5 to c.2.1.14 ..	51/3	49/–	46/9	44/6
c.2.1.15 to c.2.2.7 ..	49/–	46/9	44/6	42/3
c.2.2.8 to c.2.2.21 ..	44/6	42/3	40/–	37/9

These prices do not apply to live pigs outside the above weights, live pigs intended for breeding, live boars, live sucked sows, rigs or stags, injured or diseased pigs, live in-pig gilts, or live pigs sold (on contract registered with the Pig Industry Council) to curers in Northern Ireland. All other live pigs inside the weights c.1.2.0 to c.2.2.21 can be sold only to the Board.

Authorised Deductions.

Every pig (dead or alive) sold to a curer or to the Pigs Marketing Board is subject to a contribution at present amounting to 1/-.

In addition to this amount, a deduction of 4d. per pig may be made in the case of sales to curers to cover insurance, so that the producer will not suffer financial loss if the carcase is condemned as unfit for human consumption.

In the case of pigs sold to the Board, there is a deduction of 2/6d. per pig for marketing charges.

COST OF STANDARD PIG RATION.

The average retail cash price per cwt. of the standard ration, as calculated by the Ministry for the sixteen weeks' period ended 19th December, was 8/8¼.

The following is the ration upon which the feeding cost is based :—

Maize Meal	30%
Barley Meal	30%
Pollards (White)	20%
White Bran	10%
Meat Meal (60% Protein)	10%

GRADING STATISTICS.

Table showing the percentages of pig carcases falling within the weight and grade classes indicated, during November, 1936.

Grade A.				Grade B.				Grade C.				Total
1	2	3	4	1	2	3	4	1	2	3	4	
16.95	18.46	3.44	.74	10.79	19.44	4.82	1.31	3.11	8.20	1.23	.39	88.88

UNGRADED CARCASES.

Under Grade A measurements. U.L.	Over Grade C measurements. U.F.	Wholly condemned. U1.	Wholly black, injured or damaged. U2.	Overweights, Underweights, boars, sows, etc. X.	Partly Black. Y.	
.05	2.67	.04	.67	7.66	.03	11.12
					Total	100%

The above figures have been calculated from the purchase and grading statements which the curers furnish to the Ministry.

The following table gives the result of an analysis of the purchase and grading statements furnished by Wiltshire bacon curers in respect of live pigs delivered on direct contract by producers during the month of November, 1936.

Weight Class.	Grade 1.	Grade 2.	Grade 3.	Unsuitable.	Total
Under c.1.0.14	.05	.23	.04	—	.32
c.1.0.14 to c.1.2.7 ..	41.18	37.15	13.88	.18	92.39
c.1.2.8 to c.1.2.10 ..	.59	1.13	.88	—	2.60
c.1.2.11 to c.1.2.14 ..	.64	1.24	.96	—	2.84
Over c.1.2.14	.19	.85	.80	.01	1.85
	42.65	40.60	16.56	.19	100.

The average price per cwt. in respect of these deliveries works out at £3 5s. 8d. after making allowance for levy deductions.

The average weight works out at c.1.1.20, the net average price per pig being £4 13s. 9d.

PIGS MARKETING (GRADING) (NORTHERN IRELAND) ORDER, 1936.

A new Order in connection with the grading of pig carcases has been made by the Ministry as a result of the Determination of the Pig Industry Council for Northern Ireland, which came into operation on the 1st January, 1937. The new Order revoked the Grading Order for 1935, and in the main carries on the provisions of the preceding Order. The most important change which it prescribes is that in future pig carcases up to 1 cwt. 2 qr. 3 lb. will be graded by Wiltshire methods, and carcases over this weight will be graded on the Roll and Ham basis, irrespective of whether the carcases are graded at a Wiltshire or Roll and Ham factory. The dead weight classes and quality grades for carcases up to 1 cwt. 2 qr. 3 lb. and for carcases between 1 cwt. 2 qr. 4lb. and 2 cwt. 0 qr. 14 lb. are as follows:—

Dead Weight Classes and Quality Grades.

Part I.

Dead Weight Classes.	Quality Grades.		
	1	2	3
I. Under 1 cwt. 0 qr. 21 lb. ..	Maximum back fat $1\frac{3}{16}$ ins.	Maximum back fat $1\frac{7}{16}$ ins.	
II. 1 cwt. 0 qr. 21 lb. to 1 cwt. 2 qr. 3 lb.	Maximum shoulder fat 2 ins. Maximum loin fat $1\frac{3}{16}$ ins.	Maximum Shoulder fat $2\frac{1}{4}$ ins. Maximum loin fat $1\frac{7}{16}$ ins.	All other pigs suitable for Bacon.

Part II.

Dead Weight Classes.	Quality Grades. (Maximum thickness of back fat at shoulder).				
	A.	B.	C.	U.L.	U.F.
III. 1 cwt. 2 qr. 4 lb. to 1 cwt. 2 qr. 14 lb. ..	From $1\frac{1}{4}''$ to $1\frac{7}{8}''$	From $2''$ to $2\frac{1}{8}''$	From $2\frac{1}{4}''$ to $2\frac{1}{2}''$	Under	Over
IV. 1 cwt. 2 qr. 15 lb. 1 cwt. 3 qr. 14 lb. ..	From $1\frac{3}{8}''$ to $2''$	From $2\frac{1}{8}''$ to $2\frac{1}{4}''$	From $2\frac{3}{8}''$ to $2\frac{1}{2}''$	Grade A.	Grade C.
V. 1 cwt. 3 qr. 15 lb. to 2 cwt. 0 qr. 0 lb. ..	From $1\frac{1}{2}''$ to $2\frac{1}{8}''$	From $2\frac{1}{4}''$ to $2\frac{1}{2}''$	From $2\frac{5}{8}''$ to $2\frac{3}{4}''$	measure-ments.	measure-ments.
VI. 2 cwt. 0 qr. 1 lb. to 2 cwt. 0 qr. 14 lb. ..	From $1\frac{5}{8}''$ to $2\frac{1}{8}''$	From $2\frac{1}{4}''$ to $2\frac{5}{8}''$	From $2\frac{3}{4}''$ to $2\frac{7}{8}''$		

Other minor changes prescribed by the new Order require the furnishing by curers of Purchase and Grading Statements for all pigs or pig carcases delivered to them, irrespective of weight, class or quality grade, and also that a damage certificate must be attached to the Purchase and Grading Statement sent by a curer to the Ministry where a carcase has been certified as damaged by the grader.

TRANSIT OF CARCASES (NORTHERN IRELAND) ORDER, 1936.

This Order was made on the 24th December last, and came into force as from the 1st January. It is principally designed to secure that pork carcases are kept free from contamination or soiling in the course of transit from farm via pork market to curer's factory. The main requirements of the Order are as follows:—

1. All vehicles, including farmers' carts, used for the conveyance of carcases must be in a reasonably clean condition and free from any substance that is likely to foul or contaminate the carcases.
2. While in transit the carcases must be protected against contamination from dust and dirt by a covering of clean sheeting or some such suitable material. This applies particularly to public carriers.
3. At markets and weighing centres where the carcases are unloaded for sale, weighing or other reasons, adequate precautions must be taken to ensure that all apparatus used is clean and that the carcases while being handled, are not liable to soiling or contamination.

As will be seen from the nature of these requirements, the Order is one that concerns farmers, hauliers and weighbridge owners. These classes, as well as curers, are invited to co-operate in securing the end in view, which is a matter of public interest and importance.

BUTTER AND CREAM MARKETING SCHEME (NORTHERN IRELAND), 1936.

ELECTION OF BOARD, 1937.

The above Scheme, which came into operation on the 5th May, 1936, provided, inter alia, that the Scheme should be administered by the "Butter and Cream Marketing Board (Northern Ireland)". The Board, which consists of seven persons, was in the first instance appointed by the Minister of Agriculture to hold office until the 31st March, 1937. Thereafter the Board is to consist of seven members, of whom three will be appointed by the Minister of Agriculture and four will be elected by registered producers. The first election to decide the four members will, therefore, be held in the month of March next.

The members will be elected by producers of butter or cream as defined in the Scheme whose names appear on the register of producers on the 1st February in the year in which the election is to be held, and it should be noted that the Scheme specifically states that candidates shall be nominated and votes cast on behalf of each registered producer by the manager of the creamery owned or occupied by the registered producer.

Candidates for election to the Board require to be nominated in writing by two registered producers as proposer and seconder, both of whose names must appear on the register of producers on the 1st February next. The nomination paper must be sent by registered post so as to reach the Ministry of Agriculture, Stormont, Belfast, not later than the 20th February, 1937. A candidate wishing to withdraw his nomination may do so by sending by registered post a notice in writing of such withdrawal to the Secretary, Ministry of Agriculture, Stormont, Belfast, not later than the 25th February, 1937.

For the purpose of the election the Ministry will allot to each registered producer a number of votes proportionate to the number of gallons of milk delivered to that registered producer for the purpose of the extraction of cream for sale as such or for manufacture into butter during the calendar year 1936 at all premises registered as a central creamery or as an auxiliary creamery under the Marketing of Dairy Produce Act (Northern Ireland), 1929, and controlled by that producer on the date of the election. Each registered producer shall be entitled to give the number of votes so allotted to him.

The election will be conducted by post and not later than the 10th March, 1937, a voting paper will be sent by post by the Ministry to every producer whose name appears on the register of producers on the 1st February, 1937. Only such of the voting papers as are properly completed and reach the Ministry on or before the 20th March, 1937, will be taken into account.

Of the four members now to be elected two of them will hold office for one year and two for two years, the retiring members to be decided by agreement among the elected members of the Board, or failing such agreement, by lot. The other two members will retire in 1939. Accordingly an election for two members will be held in 1938, and in every year thereafter.

THE CATTLE INDUSTRY (EMERGENCY PROVISIONS) ACTS, 1934 AND 1935.

The following were the numbers of Northern Ireland cattle certified for the "beef subsidy" during the periods mentioned. Since the 1934 Act came into

operation at the commencement of September in that year the totals may be stated to be in respect of the first quarter of each of the first three years.

Month.	Steers.	Heifers.	Cow Heifers.	Total.
September, 1936 ..	8,242	2,796	280	11,318
,, 1935 ..	8,034	2,804	191	11,029
,, 1934 ..	5,178	1,531	114	6,823
October, 1936 ..	7,995	2,793	231	11,019
,, 1935 ..	10,366	3,408	211	13,985
,, 1934 ..	5,162	1,816	139	7,117
November, 1936 ..	6,730	2,549	209	9,488
,, 1935 ..	7,686	3,171	194	11,051
,, 1934 ..	4,510	1,848	140	6,498
Total for Quarter, 1936	22,967	8,138	720	31,825
,, ,, 1935	26,086	9,383	596	36,065
,, ,, 1934	14,850	5,195	393	20,438

It will be noted that the total number for the Autumn quarter of last year was rather smaller than for the corresponding period of 1935, and that the decreases occurred during the months of October and November last. The total number of cattle certified on the live weight basis in the United Kingdom increased from **352,970** for the first quarter of the subsidy ended **30th November, 1934**, to **409,621** in the corresponding quarter of **1935**, and to **421,510** for the similar period of last year. Thus the percentage of Northern Ireland cattle of these totals, which amounted to **5.79%** for the **1934** quarter, increased to **8.8%** for the **1935** quarter, and then dropped to **7.55%** for the quarter ended **30th November last.**

The average prices per live cwt. of all cattle in respect of which payments have been made by the Committee have been as follows:—

	England and Wales.			Scotland.			Northern Ireland.			United Kingdom.		
	1936	1935	1934	1936	1935	1934	1936	1935	1934	1936	1935	1934
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
January ..	35 2	35 2	—	38 0	39 0	—	30 9	31 3	—	35 5	35 10	—
February ..	35 2	33 10	—	37 5	37 2	—	31 11	30 10	—	35 5	34 4	—
March ..	35 2	33 5	—	36 4	36 1	—	32 4	29 10	—	35 2	33 9	—
April ..	35 11	33 11	—	37 0	36 0	—	31 11	29 8	—	35 11	34 2	—
May ..	36 11	35 5	—	37 6	37 5	—	33 1	30 11	—	36 10	35 7	—
June ..	39 1	36 7	—	40 3	38 11	—	35 4	32 4	—	39 2	36 10	—
July ..	38 4	35 10	—	40 3	40 2	—	34 1	31 11	—	38 6	36 6	—
August ..	37 4	33 11	—	40 1	37 7	—	34 7	31 0	—	37 9	34 6	—
September ..	35 6	33 4	37 0	39 0	36 4	40 10	32 4	29 4	33 7	36 0	33 8	37 9
October ..	34 0	32 8	34 10	38 3	35 7	38 11	30 10	28 2	31 3	34 7	32 11	35 7
November ..	33 2	32 5	33 9	38 4	36 6	38 8	29 10	27 7	30 1	33 11	32 9	34 7
December ..	—	35 0	35 5	—	38 2	39 7	—	28 10	30 10	—	35 3	36 0

The average live weights of the cattle in respect of which payments have been made by the Committee have been as follows:—

NOTE.—The average weights given in the following table are calculated from the nett weights on which payments have been made. The average weights of the cattle, as weighed at the Centres, would be 28 lb. heavier in each case.

	England and Wales.			Scotland.			Northern Ireland.		
	1936	1935	1934	1936	1935	1934	1936	1935	1934
	c. q. lb.	c. q. lb.	c. q. lb.	c. q. lb.	c. q. lb.	c. q. lb.	c. q. lb.	c. q. lb.	c. q. lb.
January ..	9 2 21	9 2 24	—	9 3 14	9 3 8	—	8 2 4	8 2 20	—
February ..	9 2 15	9 2 18	—	9 3 9	9 3 8	—	8 1 14	8 2 13	—
March ..	9 2 7	9 2 15	—	9 3 13	9 3 8	—	8 0 26	8 1 23	—
April ..	9 1 20	9 2 8	—	9 3 12	9 3 17	—	8 0 19	8 1 20	—
May ..	9 1 4	9 2 0	—	9 3 3	9 3 11	—	8 0 5	8 1 2	—
June ..	9 0 17	9 1 7	—	9 3 6	9 3 24	—	8 0 1	8 0 26	—
July ..	9 0 22	9 1 7	—	9 2 7	9 3 9	—	8 0 9	8 1 4	—
August ..	9 0 27	9 1 16	—	9 1 20	9 3 9	—	8 0 25	8 1 6	—
September ..	9 1 1	9 1 18	9 2 3	9 1 23	9 3 9	9 2 24	8 0 22	8 1 16	8 2 15
October ..	9 1 9	9 1 13	9 1 20	9 1 27	9 3 5	9 2 23	8 1 15	8 1 20	8 2 9
November ..	9 1 21	9 1 17	9 1 21	9 2 16	9 3 8	9 3 1	8 1 17	8 1 20	8 2 13
December ..	—	9 2 26	9 3 3	—	9 3 11	9 3 3	—	8 1 22	8 2 13

Owing to the fact that more than one-third of the fat cattle are sold at markets held on Mondays, and the numbers sold each day decrease as the week proceeds, the numbers certified each month have to be adjusted to allow for satisfactory comparisons from month to month and with the corresponding month of previous years. The adjusted figures of the numbers of cattle certified at Live-weight Centres in the United Kingdom in each month since the Subsidy Scheme commenced are as follows:—

ADJUSTED FIGURES OF NUMBERS OF ANIMALS CERTIFIED.

Month.	1936	1935	1934
January ..	139,852	130,316	——
February ..	144,217	130,325	——
March ..	140,080	133,822	——
April ..	142,769	135,499	——
May ..	136,552	135,061	——
June ..	123,042	123,773	——
July ..	126,485	116,458	——
August ..	129,304	119,899	——
September ..	137,307	137,024	121,429
October ..	146,763	138,409	116,874
November ..	——	133,987	114,894
December ..	——	125,941	114,140

The total payments made under the terms of the Acts to Northern Ireland owners up to and including 2nd January, 1937, amounted to £592,008 11s. 3d.,

and were in respect of 283,255 animals. During the week ended 2nd instant payments were made in respect of 1,178 head of cattle, including 835 steers, 319 heifers, and 24 cow-heifers, of a total weight of 10,353 cwt. and a total realised value of £17,108 7s. 0d. The average price per head was £14 10s. 0d. and per cwt. 33/1d. The average weight of each beast was 8 cwt. 3 qr. 4 lb., and the average amount of subsidy received was almost £2 4s. 0d.

AGRICULTURAL NOTES.

SEASONAL FARM NOTES.

Ploughing.—When soil conditions permit, ploughing should be pushed forward at every opportunity so that this work may be finished well in advance of sowing and planting time. The ploughing of stubbles should be completed as soon as possible, particularly where dressings of farmyard manure are being ploughed in. It is a serious mistake, however, to plough stubble land when the ground is in a wet condition, as by doing so the soil becomes hardened when drying out, resulting in difficulty in obtaining a good tilth during subsequent cultivations in the Spring. When stubble land is not sufficiently dry for ploughing, the plough can be kept going in leas, provided the ground is not in an excessively wet state.

Early ploughing is a valuable aid in obtaining a good seed bed, as winter frosts mellow the upturned soil and make it more easily worked later; it also leads to a better distribution of labour and enables full advantage to be taken of suitable weather in Spring to get sowing and planting operations completed in good time.

Land Improvement Works.—When weather conditions do not permit of ploughing and other horse work being undertaken, labour can be usefully employed at this season at improvement operations. Work such as drainage, fencing, and road-mending should be carried out before the springtime. Attention should be given to fences in need of repair, to the cutting and trimming of hedges, to the clearing out of water courses into which field drains are running, and to other work of a similar nature.

Farmers are reminded that the Ministry has a scheme in operation under which financial assistance for the carrying out of drainage and other land improvement works can be obtained. Full particulars of this scheme, along with application forms, can be obtained from the Ministry, on request.

Pastures.—There is still time to apply phosphatic manures to pastures, but if results are to be obtained in next year's grazing, immediate application of the manures is necessary. From 4 to 6 cwt. per statute acre of high grade

basic slag, Gafsa rock phosphate, or Semsol, is a suitable dressing to apply. For the lighter classes of soils, a potash manure in addition to the phosphate is necessary. About 1 cwt. of 30 per cent. potash salts per acre will be adequate.

If the fields to be manured are covered with a mat of old undecayed grass or of fog, they should be well harrowed before the manures are applied. An ordinary zig-zag harrow, the tines of which have been freshly sharpened, is quite suitable for grassland treatment. Harrowing aerates the soil and facilitates the quicker action of the manures applied. Rushes, if present, should be cut close to the ground before harrowing and manuring are carried out.

As the application of manures to pasture promotes the growth of grass early in the Spring, farmers who have not already carried out this work, and whose grassland is in poor condition, are strongly advised to do so without delay.

The recent rise in the prices of feeding stuffs has increased the cost of winter feeding considerably, and, accordingly, any steps which can be taken to shorten the winter feeding period are of particular importance from the economic point of view. The improvement of grassland by manuring is a sound and economical method of shortening the winter feeding period.

Sorting of Potatoes.—Potatoes stored in houses should be sorted, while those in pits should be lifted and sorted when opportunity offers. Seed of maincrop varieties should be placed in sprouting boxes as soon as possible so that they may be properly sprouted before planting time.

Seed Supplies.—Where it is intended to obtain fresh supplies of seed potatoes, orders should be placed without delay. A good demand is being experienced for seed from certified crops, particularly crops grown from stock seed. As these crops were pure and had a high degree of freedom from diseases, seed from such sources is strongly recommended. Unless, however, orders are placed early, there may be difficulty in obtaining supplies. Lists giving the names and addresses of growers of healthy crops of potatoes can be obtained from the Ministry, free on request.

Oats.—Supplies of seed oats should also be obtained or ordered in good time. Should there be any doubt regarding the most suitable variety to sow, the Agricultural Instructor will advise on request. The produce of specially selected stocks of the most promising varieties of oats may be available in some districts, and farmers who desire to obtain seed from these stocks should consult the Instructor in Agriculture as soon as possible. The names and addresses of the Agricultural Instructors are given on page 32 of this Report.

Wheat.—The results of the trials with Autumn wheat varieties carried out in 1936 by the Agricultural Instructors are given on page 28 of this Report.

SEASONAL LIVESTOCK NOTES.

The Use of Home-Grown Foods in Rations for Stock.—Owing to the high price of purchased feeding stuffs this winter, farmers are reminded of the importance of utilizing home-grown foods in rations for stock. Foods such as oats, barley, and wheat, can be included in meal mixtures with good results, and their use will reduce expenditure on purchased foods considerably. The use of supplies of separated milk, skim milk and buttermilk, for pigs, calves and poultry will lower the cost of feeding by obviating the necessity of purchasing expensive protein-rich foods, such as fish meal, meat meal and soya bean meal. Supplies of refuse potatoes can best be utilized in pig rations, and provided they are used in the correct proportions along with a suitable meal mixture, satisfactory results will be obtained. Information relating to the incorporation in feeding rations of foods produced on the farm are given in the following leaflets:—

No. 3—Feeding For Egg Production.

No. 16—The Feeding of Dairy Cows.

No. 20—The Hatching and Rearing of Chickens.

No. 35—The Fattening of Pigs.

No. 45—The Breeding and Rearing of Pigs.

No. 54—The Breeding and Rearing of Calves.

Copies of the above leaflets along with the others mentioned in this Report can be obtained free, on requst.

Control of Amount of Meals Fed to Stock.—In addition to effecting economies in the feeding of stock by utilizing home-grown foods to the best advantage in rations, careful attention should also be given to the amount of meals given so that the animals, while receiving an adequate allowance for their particular needs, are not being overfed. Overfeeding, besides being a wasteful practice, may also lead to the development of digestive troubles. The amounts of concentrated foods to be fed should be determined by weighing and not by measuring, since the volume of an equal weight of different meals varies considerably, and, accordingly, it is impossible to ascertain the desired amounts accurately if bulk only is considered.

For dairy cows from 3 to 3½ lbs., of a suitable meal mixture should be fed per head daily for each gallon of milk produced along with a moderate allowance of hay and roots.

Store cattle can be kept in a forward thriving condition by feeding a mixture, such as 3 parts by weight crushed oats, and 1 part by weight decorticated earthnut cake, at the rate of from 3 to 4 lbs. per head daily, in addition to hay or straw and roots.

For fattening cattle the amount of meals fed should be increased gradually by about 1 lb. per head monthly, from 4 lbs. per head daily at the commencement of fattening, until about 8 lbs. daily is being given at the end of the fattening period.

A useful guide to the amount of meals required for fattening pigs is to allow about 1 lb. of meal for each month of age with a maximum of 8 lbs. per head daily towards the end of the fattening period.

Sheep.—Where early lambs are expected, the breeding flock of sheep should receive careful attention as regards feeding and management from now onwards. As a supplement to the grass, a small allowance of a mixture of equal parts oats, decorticated earthnut cake, and bran, along with a few turnips daily, will maintain the ewes in good condition for lambing. The feeding of excessive quantities of turnips to in-lamb ewes should, however, be avoided, as this practice tends to make lambing more difficult. A fresh field of pasture should be left ungrazed from now on so that the ewes may have clean, fresh grass after lambing.

Housing of Young Pigs.—The importance of good housing accommodation for pigs, particularly for sows and litters, during the winter months may again be emphasised. Bad housing is responsible for many of the troubles and losses experienced in pig rearing. Pigs are more susceptible to changes of temperature than any other domesticated animal, and it is important, therefore, that the temperature of the house be maintained as uniformly as possible.

It is difficult to maintain an even temperature in houses which are constructed of concrete and having corrugated iron roofs. As an aid in maintaining a more even temperature in houses so constructed, the roofs should be sheeted inside, or if pen divisions are present, a hoarding of boards placed on the tops of the divisions and covering the sleeping quarters in the pens will help to make the house warmer and more comfortable. It is also a good plan to provide a wooden platform in the house on which the sow and young pigs can lie. The house should be kept always in a dry clean condition, as damp, dirty houses are conducive to outbreaks of chills and pneumonia, and also to the spread of worms and other parasites.

SEASONAL GARDEN AND ORCHARD NOTES.

Planting and Pruning.—The planting of fruit trees and bushes should be completed as soon as possible, but in no circumstances should planting be done when the ground is in a frozen or sodden condition. During favourable weather, pruning should be proceeded with as rapidly as possible so as to get this work finished before spraying begins.

Spraying Fruit Trees.—The spraying of apple trees with tar distillate washes should be undertaken whenever the trees are dry, and when there is no immediate prospect of rain. Spraying with tar distillate washes should not take place during frosty weather as the emulsion is likely to separate out when the temperature falls too low. If night frosts are expected, spraying should cease early enough each evening to allow of the spray drying on the trees before the temperature falls to freezing point.

Overhaul of Spraying Equipment.—The spraying apparatus, including guns, lances, hoses, etc., should be thoroughly overhauled in readiness for the summer spraying. All defective parts should be renewed and all working parts oiled. Neglect to do this may result in a breakdown when spraying is in progress involving delay and possibly a lowering of the value of the apple crop.

Preparation of Hot-Beds.—Where a supply of stable manure is available, a hot-bed can now be prepared for raising an early supply of such vegetables as cauliflowers, Brussels sprouts, onions and lettuce. As the fresh manure is collected it should be thoroughly mixed with about half its bulk of old leaves, or if these are not obtainable, with old manure. It may be stored under cover or in the open, but, if in the open, it should be made into a rounded heap brought to a point so as to throw off the rain. Each subsequent day's supply of manure should, after mixing with leaves or old manure, be thoroughly incorporated with that already in the heap, turning the heap so that what was on the outside is put inside, and vice versa. When enough manure has been collected, the bed may be prepared and should be made from 12 to 15 inches wider and longer than the frame to be used. The material should be placed in layers 8 or 9 inches deep and each layer trodden firm. This firming ensures that the heat is produced more slowly but over a longer period than if the material was piled up loosely. When the frame has been placed in position more of the fermenting material should be placed around it. The lights should then be placed on the frame, but these should be raised a few inches at the top for a few days to allow the steam and noxious gases to escape.

Raising of Seedlings in Hot Frames.—Seeds should be sown in shallow boxes of soil and these placed on the fermenting material inside the frame.

After the seedlings appear, the boxes must be kept close to the glass so as to encourage sturdy growth. When large enough, the seedlings may be pricked off into other boxes, and eventually they should be hardened off, by giving more ventilation to the frame, before being finally planted outside.

A suitable compost for raising seedlings consists of:—

Loam—5 parts.
Leaf soil—4 parts.
Sand—2 parts.

It has been found that much better results are obtained when superphosphate is added to the compost in the proportion of 1½ oz. superphosphate to each bushel of compost. A little lime or chalk should also be added. Persons who raise thousands of seedlings yearly, and who sterilize the soil prior to sowing, should be careful to add the superphosphate and lime to the compost AFTER sterilizing and not BEFORE.

BEANS, SHALLOTS AND POTATO ONIONS.—In districts where the soil is light and warm a sowing of broad beans can be made out of doors early in February. Shallots and potato onions can be planted at the same time.

VEGETABLES IN COLD FRAMES.—Cold frames of vegetables should be examined carefully and all decaying leaves and other rubbish removed. Ample ventilation should be given on all favourable occasions, all tendency to coddle the plants must be avoided.

TREATMENT FOR SLUGS.—Where there is any danger of slugs, the following treatment will probably be found effective. Crush to a fine powder one tablet of "Meta" and mix this with one pint measure of dry bran. Scatter the mixture around the plants. This bait must be kept dry, and if used out-of-doors, small portions of it should be placed under slates or boards for protection. "Meta" is sold by most chemists in the form of small white tablets.

CARROTS AND PARSNIPS.—The heaps of stored carrots should be examined and all roots having growing tops should have the tops removed.

Quantities of parsnips should be lifted and stored during mild weather so that a supply may be available when the ground is frozen or covered with snow.

CELERY.—The celery crop should now be lifted and the heads stored by placing them close together in an upright position in some place where they can be easily protected from rain.

Seed Potatoes.—The supply of " seed " potatoes should be examined carefully for the presence of aphides commonly known as green-fly. If these are found, the store should be fumigated with some good insecticide such as Nicotine. If fumigation of the store is not possible, spraying the tubers may be resorted to. It is most important that seed potatoes should be kept free of these insects as they are chiefly responsible for infecting healthy tubers with certain virus diseases.

Seeds List.—A list of seeds required for the coming season should be made out and the order dispatched without delay.

A supply of stakes should be obtained and prepared for use during the year.

SEASONAL POULTRY-KEEPING NOTES.

Hatching.—Hatching should now be proceeded with to full capacity so as to obtain an adequate number of early-hatched pullets for egg production next Autumn. The number of pullets required should be kept in mind when arranging the hatching programme, and sufficient eggs incubated for requirements. Under ordinary conditions, at least 4 eggs are required for each pullet produced to maturity, but it is always wiser to allow up to 6 eggs for each pullet to be retained, so that rigid culling may be carried out and only the best birds retained for egg production. It is unwise, however, to attempt to rear a greater number of chickens than the capacity of the accommodation permits; overcrowding is often responsible for heavy losses during the rearing stages.

Management of Breeding Stock.—The production of strong, vigorous, easily-reared chickens is the fundamental essential of successful poultry-keeping. With this object in view, attention should primarily be given to the breeding stock. Breeding from vigorous, well-developed and carefully selected birds which are free from disease, with particular reference to Bacillary White Diarrhoea, is the first essential in obtaining vigorous, easily reared chickens. The feeding, housing, and general management of the breeding flock should also receive particular attention, as each of these factors exercises an important influence on fertility and hatchability, and also on the quality of the chickens produced. Full particulars regarding the feeding and management of the breeding stock are given in Leaflet No. 83.

Selection of Eggs for Hatching.—The selection of eggs for hatching should be given particular attention. Good hatching eggs are obtained only when the breeding stock is fed and managed properly, but even under ideal conditions, some of the eggs produced will be unsuitable for hatching

purposes. Eggs less than 2 oz. in weight should not be used for hatching, nor should those which are badly shaped, or which have shells of rough texture. Very large eggs should not be set as they rarely hatch well. It is a good plan to submit eggs for hatching to the light test, as this will reveal slight cracks which may escape casual observation; it will also indicate if the eggs are fresh, and if they are free from blood spots. Eggs having blood spots should not be set as there is a risk of perpetuating this defect.

Storage of Hatching Eggs.—The storage of hatching eggs should also receive attention as good eggs are often spoiled through faulty storage. Best results are obtained from fresh eggs, but on most farms some days must necessarily elapse from the time some of the eggs are laid until they are set. At the most, however, eggs for hatching should be not more than a week old, while for incubator lots not more than four days should elapse until they are set, if best results are to be obtained.

Hatching eggs should be stored in an airy room where the temperature is more or less uniform and does not fall below 40 degrees or rise above 70 degrees Fahrenheit. A temperature of 50 degrees Fahrenheit in the storage room is ideal. Excessive evaporation from the eggs should be avoided as this is detrimental to good hatching. Evaporation can be largely prevented by placing the eggs in fresh bran or chaff. During storage it is beneficial to turn the eggs once daily. A suitable and convenient receptacle in which to store hatching eggs is an ordinary egg case. Provided the top of the case is securely fastened, the eggs can be turned daily during storage by simply turning the case over on to a different side each day.

Hatching.—As far as possible all the eggs of one hatch in an incubator should be of the same size. If eggs of different sizes are included they will not be likely to hatch well.

Avoidance of Chills.—Chills, both during incubation and after hatching, are the most common cause of losses in chicken rearing, and every precaution should be taken to guard against them. It should be noted that eggs can be chilled before being placed in the incubator and hatchability destroyed. During frosty weather, eggs should be collected frequently, at least twice daily, from the nests and stored in a room where the temperature does not fall to freezing point. Leaving eggs in the poultry house overnight will render them unfit for hatching. During incubation the eggs should not be taken out for testing after the fourteenth day, while the incubator should not be opened after the nineteenth day, otherwise chills may be contracted and the chicks die in the shells before hatching actually takes place.

Before removing the chickens from the incubator, the temperature of the machine should be lowered gradually until it reaches the same level as that of the hover to which the chickens are to be transferred. The temperature under the canopy of the hover should be about 90 degrees Fahrenheit when the chickens are first placed in it.

When transferring the chickens from the incubator to the hover, great care is necessary as it is at this stage that chills are frequently contracted. A basket lined with a piece of warmed blanket is a suitable receptacle for transferring the chickens, and the transfer should be made with as little delay as possible.

A temperature of from 85 to 90 degrees Fahrenheit should be maintained in the hover during the first week, and care taken to prevent the chicks from wandering too far from the source of heat during this period. A temporary frame of light boards placed around the hover will prevent this occuring and also assist in preventing floor draughts in the house from reaching the chickens. Useful information relating to the hatching and rearing of chickens is given in Leaflet No. 20. This Leaflet also gives hints on the management of incubators.

Should unsatisfactory hatches be obtained or an abnormal number of deaths occur, the local Poultry Instructor should be consulted for advice as to the methods to adopt to improve matters. The Poultry Instructors, whose names and addresses are given on pages 32 and 33 of this Report, will visit and advise on matters relating to poultry keeping free, on request. Post-mortem examinations and reports on chicks can also be obtained free by sending one or two dead specimens to the Ministry's Veterinary Research Division, The Farm, Stormont, Belfast. Postage on parcels containing dead chicks should be paid.

AUTUMN WHEAT VARIETY TRIALS.

As in previous years, autumn wheat variety trials were carried out by the Agricultural Instructors during the past season. Six varieties, including a new variety called Little Tich, which had not been previously included in these trials, were under test, and the average results obtained from 6 centres at which all the varieties were included are given in the following table. For comparison purposes the average yields obtained in the trials carried out in 1935, along with the true average yields in respect of both years' tests, are also given.

Year.	Victor.			Squareheads. Master.			Little Tich.			Queen Wilhelmina.			Redman.			Yeoman II.		
	Grain		Straw	Grain		Straw	Grain		Straw	Grain		Straw	Grain		Straw	Grain		Straw
	c.	qr.	cwt.	c.	qr.	cwt.	c.	qr.	cwt.	c.	qr.	cwt.	c.	qr	cwt.	c.	qr.	cwt.
1936 (6 centres)	16	3	30	16	2	29	13	3	28	19	2	32	16	0	30	17	2	28
1935 (8 centres)	24	0	32	23	0	34	—		—	25	3	34	22	3	31	21	3	31
True average yield 1935/36 (14 centres)	20	19	31	20	4	32	—		—	23	0	33	20	0	30	20	0	30

The yields obtained at most centres in the 1936 trials were lower than those in the previous year, and consequently the average yields show a general decrease as compared with the averages in 1935. It will be noted that, as in the 1935 trials, the variety Queen Wilhelmina gave the highest average yield. This variety has consistently given high yields in these trials, and is one of the most prolific wheats in general cultivation. It produces a large, plump, white grain, with long straw of moderate strength. It can be relied on to produce heavy yields when grown on the better classes of soils.

The other varieties tested gave almost similar yields when the averages of the two years' trials are considered. Both Victor and Yeoman II., which is an improved type of the variety Yeoman, are suitable for growing on the stronger and richer types of soils where there is a danger of other varieties lodging.

Squareheads' Master has given consistently good average yields in all the trials carried out. This is a well-known and popular variety that can be depended on to produce satisfactory crops under a wide range of soil conditions.

The variety Redman, which was included in the 1935 tests for the first time, has given good average yields in both years' trials. The grain of Redman is red, plump, and round, and the straw is long and resists lodging well.

The new variety, Little Tich, gave the lowest yields, but further trials with this variety will be necessary before an opinion as to its suitability for Northern Ireland conditions can be given.

ANNOUNCEMENTS AND REMINDERS.

GENERAL.

Inspections of Bulls and Boars.—The inspections of bulls for licences began on the 19th January. All bulls calved during the period 1st January, 1936, to 30th June, 1936, should be entered for these inspections. The inspections of boars farrowed during the months of July, August, and September, 1936, are now in progress. Any outstanding applications for inspections should be furnished to the Ministry at once.

Seed Supplies.—Farmers desiring fresh supplies of seed oats and potatoes are recommended to obtain these as soon as possible. Particulars regarding the most suitable varieties of oats to sow can be obtained from the Agricultural Instructor for the district, while lists giving the names and addresses of growers of selected stocks of potatoes, and of those having varieties certified pure by the Ministry, can be obtained, free on request.

Drainage Scheme.—Financial assistance for the carrying out of drainage and other land improvement works can be obtained under the Ministry's loan drainage scheme. Particulars will be sent on request.

County Poultry Stations.—Lists of holders of County Poultry Stations have now been issued by the County Committees of Agriculture, and copies can be obtained free on application to the Secretary of the Committee of Agriculture for the County. The birds on these stations have all passed the test for Bacillary White Diarrhoea disease, and hatching eggs can be obtained at moderate prices. Lists, giving the names and addresses of duck, goose, and turkey station holders, can also be obtained from the Secretary of the County Committee of Agriculture.

Accredited Poultry Farms.—Lists, giving the names and addresses of owners of Accredited Poultry Farms, can be obtained free from the Ministry, on request. Hatching eggs from superior stock, all of which have also passed the test for Bacillary White Diarrhoea disease, can be obtained from these farms.

LECTURES AND CLASSES.

The following lectures and classes have been arranged by County Committees of Agriculture:—

LECTURES.

County.	Day & Date.	Centre.	Time.	Subject.
Armagh	Fri., 22nd January	Milltown P.E. School.	7-30 p.m.	Results of Agricultural Experiments.
,,	Mon., 25th January	Taniokey P.E. School.	,,	Tillage Crops.
,,	Wed., 27th January	Newtownhamilton Temperance Hall.	,,	Feeding of Farm Stock.
,,	Thurs., 28th January	Aghavilly P.E. School.	,,	Results of Experiments.
,,	Mon., 1st February	Mullahead Old School.	,,	Results of Experiments.
,,	Wed., 3rd February	Salter's Grange P.E. School.	,,	The Purchase of Seeds, Manures, and Feeding Stuffs.
,,	Thurs., 11th February	Fernaboy P.E. School.	,,	Results of Experiments.
,,	Thurs., 18th February	Turmoyra P.E. School.	,,	Results of Experiments.
Fermanagh	Fri., 22nd January	Derryharney P.E. School.	7-30 p.m.	Agricultural Topics including Grassland Management, Agricultural Experiments, Livestock Feeding and Marketing Schemes.
,,	Fri. 29th January	Clonmaulin P.E. School.	,,	do.
,,	Fri., 5th February	Derryhillagh P.E. School.	,,	do.
,,	Fri., 12th February	Coolrakelly P.E. School.	,,	do.
Londonderry	Mon., 18th January	Faughanvale P.E. School.	7-30 p.m.	Profitable Poultry-Keeping.
,,	Tues., 19th January	Groarty P.E. School Londonderry.	,,	do.
,,	Wed., 20th January	Drumneechy P.E. School, Dungiven.	,,	Feeding and Management of Cattle and Sheep.
,,	Mon., 1st February	Blagh P.E. School, Coleraine.	,,	Profitable Poultry-Keeping.
,,	Tues., 2nd February	Collins P.E. School, Coleraine.	,,	do.
,,	Mon., 8th February	The Orange Hall, Myroe.	,,	do.

CLASSES.

County.	Day & Date of Commencement of Class.	Centre.	Time at which Class is held.	Subject.
Antrim	Mon., 25th January	Ballinderry Orange Hall.	7 to 9 p.m.	Poultry keeping.
Armagh	Mon., 18th January	Eshuary P.E. School, Bessbrook.	7 to 9 p.m.	do.
Down	Wed., 27th January	St. Mary's Hall, Burress, Warrenpoint.	3 to 5 p.m.	do.

Each of these classes will be held on several nights each week, and will continue for a period of about 4 weeks.

BROADCAST TALK.

A talk entitled, "The Care and Handling of Milk", will be given from the Belfast Station of the British Broadcasting Corporation on Friday, 5th February, at 8 p.m., by Mr. H. O'H. O'Neill, B.Agr., B.Sc., of the Ministry of Agriculture.

NAMES AND ADDRESSES OF INSTRUCTORS EMPLOYED BY COUNTY AGRICULTURAL COMMITTEES.

County.	Agricultural Instructors.	Horticultural Instructors.	Poultry Instructors.
Antrim	North Antrim : Mr. P. T. O'Hare, Broadway, Ballymena. South Antrim : Mr. R. D. Mackay, Church Street, Antrim.	North Antrim : Mr. W. R. Saunderson, Rosebank, Cushendall Road, Ballymena. South Antrim : Mr. R. H. Clarke, 21, Ridgeway Street, Stranmillis, Belfast.	North Antrim : Miss A. M. Nedwill, 7 Broughshane Street, Ballymena. South Antrim : Miss R. E. Dick, Church Street, Antrim.
Armagh	Mr. J. C. Patterson, c/o Agricultural Organiser, Russell Street, Armagh.	North Armagh : Mr. J. Hagan, Roseneath, Armagh. South Armagh : Mr. J. Scrimgeour, Rockmount, Newry.	Miss A. G. English, 5, Barrack Hill, Armagh.
Down	North Down : Mr. R. W. Dickson, Bushey Park, Newtownards. South Down : Mr. R. F. Small, The Square, Castlewellan.	North Down : Mr. J. C. Stewart, Dufferin Place, Killyleagh. South Down : Mr. D. W. Bailie, Ballydown, Banbridge.	North Down : Miss E. F. Anderson, Brook House, William Street Road, Newtownards. Mid Down : Miss L. Walters, Rose Cottage, Spa, Ballynahinch. South Down : Miss W. McMullen, 42, Newry Street, Rathfriland.
Fermanagh	Mr. D. T. Ritchie, Jamestown, Ballinamallard.	Mr. J. C. Johnston, The Picotee, Enniskillen.	Miss A. M. Callery, The Brooke, Enniskillen.

County.	Agricultural Instructors.	Horticultural Instructors.	Poultry Instructors.
Londonderry	Mr. T. H. Lowe, c/o Secretary, Committee of Agriculture, Courthouse, Coleraine.	Mr. A. L. McL. May, Nedeen, Coleraine.	North Derry : Miss E. M'Cluggage, 39, Catherine Street, Limavady. South Derry : Miss M. Allison, c/o Mrs. Smythe, Craigmore House, Maghera.
Tyrone	Strabane District : Mr. W. J. Patterson, Mellmount, Strabane. Omagh District : Mr. E. S. Daly, Coneywarren, Omagh. Dungannon District : Mr. D. C. Gamble, Roan Lodge, Coalisland.	Mr. Duncan M'Kenzie, 7, James Street, Omagh.	North Tyrone : Miss M. H. Davidson, Homelea, Omagh. South Tyrone : Miss C. J. Davidson, Ranfurly Arms, Dungannon.

SCHOOL NEWS.

ULSTER DAIRY SCHOOL, COOKSTOWN.

The final term of the year 1936 ended on the 23rd December last, and as a result of the examination held at the end of the term the following pupils who had completed the ordinary school course of three terms, were successful in qualifying for certificates in Poultry-keeping, Dairying and Rural Housewifery :—

Miss E. Agnew, Groggan, Randalstown, County Antrim.
Miss E. M. Bunting, Tully, Glenarm, County Antrim.
Miss A. Donnelly, Ballyman, Swateragh, Co. Londonderry.
Miss C. V. Forster, Tattin Bar, Rosslea, Co. Fermanagh.
Miss E. Higgins, Lisnamonagh, Martinstown, Co. Antrim.
Miss E. Lowry, Gortahern, Portglenone, Co. Antrim.
Miss M. L. Morrison, Springfield, Macleary, Coleraine, Co. Londonderry.
Miss P. Pullin, Main Street, Glenarm, Co. Antrim.
Miss J. Robinson, Beltoy, Glenoe, Larne, Co. Antrim.
Miss E. A. Rogers, Cullion, Lislap P.O., Omagh, Co. Tyrone.
Miss A. M. Boyd, Carncullagh, Dervock, Co. Antrim.
Miss F. Simms, Ballydougherty, Loughgilly, Co. Armagh.
Miss H. M'Kinstry, Drumconnell, Armagh.
Miss E. V. Berkley, Poplar Hill, Tullyhogue, Co. Tyrone.

For the term which commenced on the 5th January the following new pupils were admitted to begin the course of training :—

Miss C. B. Starkie, The Quarter Farm, Killough, Co. Down.
Miss S. M. Dooher, Claggan North, Donemana, Co. Tyrone.
Miss I. M. Mann, Sunnyside, Ballygrainey, Co. Down.
Miss F. E. Miller, Ratoran, Tempo, Co. Fermanagh.
Miss D. M'Bride, Tanvalley, Annaclone, Banbridge, Co. Down.
Miss B. O'Hagan, Crossland, Garvagh, Co. Londonderry.
Miss R. A. Nugent, Ballintrain, Sixmilecross, Co. Tyrone.
Miss A. E. Brown, Drogan, Killadeas, Ballinamallard, Co. Fermanagh.
Miss R. G. Walker, Hillhall, Lisburn, Co. Antrim.
Miss A. H. M'Alonan, Killycowan, Glarryford, Co. Antrim.
Miss M. E. Greene, Drumbeggan, Monea, Enniskillen, Co. Fermanagh.
Miss H. C. Quinn, Drumfad, Ballygawley, Co. Tyrone.
Miss Kate Corrigan, White Rocks, Church Hill, Enniskillen, Co. Fermanagh.
Miss A. M. Young, Aghalunney, Killeter, Strabane, Co. Tyrone.
Miss M. M'Bride, Tanvalley, Annaclone, Banbridge, Co. Down.

Applications for admission to the term which will begin on the 6th April next are now being received by the Ministry, and as applications are dealt with in the order in which they are received, girls who desire to take out a course of training at this school are advised to send applications to the Ministry as soon as possible. The school prospectus contains an application form, and copies may be obtained free of charge from the Secretary of any County Committee of Agriculture, from the local Instructor in Poultry-keeping, from the Lady Superintendent, Ulster Dairy School, Cookstown, or direct from the Ministry's offices at Stormont, Belfast.

NORTH-WEST SCHOOL, STRABANE.

The final term of the year 1936 at this school also ended on the 23rd December last, and there were 23 pupils in the class, all of whom held scholarships awarded by the various County Committees of Agriculture. The number of scholarship holders from each county was as follows:—

County Antrim	2
,, Armagh	Nil
,, Down	3
,, Fermanagh	4
,, Londonderry ..	7
,, Tyrone	7

The following pupils are now in residence at the school as scholarship holders for the term 5th January to 25th March, 1937, two students, one from County Londonderry and one from County Fermanagh, being holders of scholarships provided under the terms of the Anne Hall Endowment:—

County Antrim:

Miss G. E. Stevenson, Knockans, Finvoy, Ballymoney.
Miss R. A. M'Auley, Teaughs, Glenshesk.

County Armagh :

Miss E. Conlon, Mounthill, Ballsmill.
Miss M. E. Conlon, Cornonagh, Ballsmill.
Miss Angela Carragher, Ballinarea, Altnamackin P.O.
Miss Minnie Blacker, Dorsey, Cullyhanna, P.O.
Miss Brigid Blacker, Dorsey, Cullyhanna P.O.

County Down :

Miss A. D. Shaw, Mourne View, Creevy, Lisburn.
Miss M. J. M'Keown, Drumalig, Carryduff P.O.

County Fermanagh :

Miss M. K. Courtney, Staraghan, Newtownbutler.
Miss O. A. Little, Clough, Newtownbutler.
Miss B. M. F. Doherty, Derriens West, Letterbreen.
Miss E. F. Chambers, Clonursan, Macken P.O.

County Londonderry :

Miss N. P. Pollock, Claudy.
Miss E. Lynch, Laughtilube, Park.
Miss M. Bradley, Corrud, Maghera.

County Tyrone :

Miss E. E. M. Gallagher, Churchtown, Castlederg.
Miss A. L. Gallen, Churchtown, Castlederg.
Miss E. J. Harkin, Aughafad, Donemana.
Miss R. M'Namee, Deroar, Beragh.
Miss M. A. Owens, Shantavney, Ballygawley.

The County Committees of Agriculture are now offering a limited number of free scholarships to this school for the session which will begin on the 6th April next, and girls desirous of being considered for the award of these scholarships should send in their applications as soon as possible to the Secretary of the County Committee of Agriculture for the county in which they reside. Copies of the school prospectus may be obtained free of charge from the Secretary of the County Committee of Agriculture, the local Instructor in Poultry-keeping, the Lady Superintendent, North-West School, Strabane, or direct from the Ministry's offices, Stormont, Belfast. The prospectus contains application forms.

FORESTRY.

SCHEME FOR SUPPLYING YOUNG TREES AT REDUCED PRICES TO FARMERS.

The Ministry of Agriculture desires to direct the attention of farmers to the Scheme under which young forest trees of various species grown in the Ministry's nurseries are supplied at the reduced price of 30/- per 1,000. There is at present a number of such trees available of each of the species mentioned below and those who wish to purchase 1,000 or more should communicate at once with the Secretary, Ministry of Agriculture, Stormont, Belfast, from

whom copies of the Scheme and application forms can be obtained. Each lot of 1,000 trees would include not more than two of the undermentioned species, except that a few *Pinus Murrayana* or Mountain Pine, of which there is only a limited quantity, and which are intended for shelter belts could be included in a consignment, if desired, for planting in the outer rows of the belts composed of other species :—

Sitka Spruce,
Japanese Larch,
Norway Spruce,
Douglas Fir,
Mountain Pine,
Pinus Murrayana.

MILK SUPPLIED TO CREAMERIES.

PROSECUTIONS FOR OFFERING MILK IN DIRTY CANS.

The importance of observing the utmost cleanliness in regard to the cans in which milk is sent to registered creameries in Northern Ireland was emphasised at Dromore (County Tyrone) Petty Sessions on the 6th January, 1937, when five suppliers of Dromore Registered Central Creamery were prosecuted and fined for offering milk in dirty cans.

Captain Moore, District Inspector, who prosecuted, said the cases were the first of the kind in Northern Ireland and the Ministry of Agriculture regarded the offences as most serious. It was absolutely essential that supplies of milk to creameries should be clean and sweet, not only from the point of view of public health, but in order to ensure that the butter and cream made from the milk should be of the highest quality. Milk offered in dirty cans was bound to affect adversely the quality of creamery produce and would most certainly prejudice the sale of butter and cream.

All the defendants had previously been warned and Major Dickie, R.M., in passing sentence, said as they were the first prosecutions of the kind he would only impose the minimum fine of 20/- in each case. In further cases of that kind, however, he would inflict very heavy fines.

FIFTEENTH EGG-LAYING TEST AT STORMONT.

RESULTS TO THE END OF THE FIRST TWELVE WEEKS.

The third four-weekly period ended on the 24th December, 1936. There was a further increase in average egg production during the period, which was due partly to some of the birds which were moulting during the previous period coming into lay. There were, however, 144 birds still moulting at the end of the third period.

The number of eggs laid during the third period was 12,422, or an average of 14.5 per bird based on the total of 864 birds originally penned. Of this number, 10,804 or 86.8 per cent. were scoring eggs (super grade and first grade, 2 oz. each and over in weight) whereas the percentage of scoring eggs laid in the previous period was 76.4 per cent.

The total number of eggs laid during the twelve weeks the test has been in progress was 34,447, which is a flock average of nearly 40 eggs per bird. Of the different breeds represented in the test, the White Wyandottes have the highest average production.

Three birds died during the third period, bringing the total number of deaths since the start of the test to 13. This represents a mortality rate of 1.5 per cent.

The following are particulars of the leading pens in the various sections as at the end of the period under review :—

SECTION 1. WHITE WYANDOTTES (OPEN).

Position.	No. of pen.	Name and Address of Owner.	No. of eggs laid during 12 weeks.				Score Value
			Super Grade	1st Grade	2nd Grade	Below 2nd Grade	
1	13	Mrs. J. R. Jackson, Fort View, Coleraine, Co. Londonderry.	184	140	58	1	324
2	22	Mr. J. C. Stewart, Balloo, Killinchy, Co. Down.	185	108	36	4	293
3	3	Mrs. J. M. Brogden, Fernshaw, Dungannon, Co. Tyrone.	87	200	102	3	287
4	27	Mrs. H. E. Stevenson, Dreemore, Dungannon, Co. Tyrone.	96	166	99	7	262

SECTION 2. WHITE LEGHORNS (OPEN).

1	33	Mrs. E. Johnston, Craigboy, Donaghadee, Co. Down.	152	71	18	—	223
2	29	Mrs. F. R. Browne, Lakeview, Enniskillen, Co. Fermanagh.	38	184	90	4	222
3	39	Mr. J. Waugh, Ballyrickard, Kilwaughter, Larne, Co. Antrim.	75	145	17	3	220

SECTION 3. RHODE ISLAND REDS (OPEN).

Position.	No. of pen.	Name and Address of Owner.	No. of eggs laid during 12 weeks. Super Grade	1st Grade	2nd Grade	Below 2nd Grade	Score Value
1	53	Miss J. A. Irwin, Mount Irwin, Tynan, Co. Armagh.	140	188	13	—	328
2	62	Mrs. D. Patterson, Ballycastle Road, Coleraine, Co. Londonderry.	110	158	114	6	268
3	60	Mr. R. J. O'Hanlon, Violet Cottage, Unshinagh, Portadown, Co. Armagh.	132	129	12	1	261
4	59	Mrs. J. M'Neill, Drain's Bay, Larne, Co. Antrim.	225	17	1	—	242

SECTION 4. ANY OTHER PURE BREED (OPEN).

1	75	Mrs. M. Finlay, Langfield, Armoy, Co. Antrim. (Light Sussex.)	115	169	72	—	284
2	86	Mr. R. Holmes, Moneycarrie, Killykergan, Coleraine, Co. Londonderry. (Buff Rocks)	118	136	76	6	254
3	74	Miss M. Crowe, Knappagh, Killylea, Co. Armagh. (Light Sussex)	110	109	59	2	219

SECTION 5(*a*). WHITE WYANDOTTES (STATION HOLDERS).

1	99	Mrs. M. Rodgers, Ballyginney, Dundrum, Co. Down.	228	110	50	2	338
2	93	Mr. C. E. Crooke, The Rocks, Blaney, Enniskillen, Co. Fermanagh.	102	208	87	4	310
3	91	Mr. W. A. Bell, Donaghanie, Beragh, Co. Tyrone.	109	196	81	3	305
4	101	Mrs. M. J. Veitch, Knockninny, Thompson's Bridge, Co. Fermanagh.	160	109	9	—	269

SECTION 5(*b*). WHITE LEGHORNS (STATION HOLDERS).

1	112	Mrs. M. Noble, Roundpark House, Killycramph, Lisnaskea, Co. Fermanagh.	44	151	47	2	195
2	105	Mrs. J. Brown, Gorsebank, Culcrum, Co. Antrim.	83	107	45	3	190
3	111	Mrs. J. Knox, Shanmullagh, Ederney, Co. Fermanagh.	91	90	7	1	181

SECTION 5(*c*). RHODE ISLAND REDS (STATION HOLDERS).

Position	No. of Pen.	Name and Address of Owner.	No. of eggs laid during 12 weeks.				Score value.
			Super Grade	1st Grade	2nd Grade	Below 2nd Grade	
1	117	Mrs. R. J. Dunn, Ballyskeagh, Artigarvan, Co. Tyrone.	146	189	16	—	335
2	127	Mrs. H. McMaster, Little Ballymena Broughshane, Co. Antrim.	164	98	11	2	262
3	122	Mrs. W. McCallum, Aldohil House, Newtownstewart, Co. Tyrone.	77	182	56	2	259
4	121	Mrs. S. B. Lyons, Ballindreen, Coleraine, Co. Londonderry.	145	87	11	—	232

SECTION 6. POULTRY CLUBS AND YOUNG FARMERS' CLUBS.

Position.	No. of pen.	Club and Breed.	No. of eggs laid during 12 weeks.				Score Value
			Super Grade	1st Grade	2nd Grade	Below 2nd Grade	
1	145	Saintfield Young Farmers' Club. Co. Down. (Rhode Island Red)	101	148	36	1	249
2	137	Ballywalter Young Farmers' Club. Co. Down. (White Wyandotte)	119	123	48	4	242
3	141	Crumlin Poultry Club, Co. Antrim. (White Wyandotte)	66	146	96	14	212

"Score value" means the total of the super-grade and first-grade eggs.

The pens occupying first and second places in the entire test have been entered by Station-holders. Mrs. Rodgers' pen of White Wyandottes is leading Mrs. Dunn's pen of Rhode Island Reds by the narrow margin of three scoring eggs.

PRICES OF FEEDING STUFFS.

The following table shows the average retail prices per cwt. of Feeding Stuffs at 1st January, 1937, with comparative figures for the corresponding date in 1936.

	1937.					1936.				
	Price per cwt.	Protein equivalent	Price per unit of protein equivalent	Starch equivalent	Price per unit of starch equivalent	Price per cwt.	Protein equivalent	Price per unit of protein equivalent	Starch equivalent	Price per unit of starch equivalent
STARCHY FOODS :	s. d.		s. d.		s. d.	s. d.		s. d.		s. d.
Maize (whole)	6 9	6.8	19 10	81.5	1 8	5 0	6.8	14 8	81.5	1 3
Maize Meal	7 2	6.8	21 1	81.5	1 9	5 3	6.8	15 5	81.5	1 3
Bran, Red	8 10	10.0	17 8	45.3	3 11	7 1	10.0	14 2	45.3	3 2
Bran, White	9 8	10.0	19 4	45.3	4 3	8 5	10.0	16 10	45.3	3 9
Pollard, Brown	8 9	11.0	15 11	71.2	2 5½	7 2	11.0	13 0	71.2	2 0
Pollard, White	9 6	11.0	17 3	71.2	2 8	8 3	11.0	15 0	71.2	2 4
Barley Meal	9 6	6.2	30 8	69.7	2 9	6 9	6.2	21 9	69.7	1 11
Oats	5 10½	7.6	15 6	60.0	1 11½	4 10	7.6	12 9	60.0	1 7
Wheat (Whole)	9 9	9.6	20 4	72.0	2 8½	7 2	9.6	14 11	72.0	2 0
PROTEIN FOODS :										
Linseed Cake, home-made ..	11 6	25.0	9 2½	71.8	3 2½	9 9	25.0	7 10	71.8	2 9
Linseed Cake, foreign	10 9½	25.0	8 8	71.8	3 0	9 4	25.0	7 6	71.8	2 7
Linseed Cake Meal	11 0½	25.0	8 10	72.8	3 0½	9 4	25.0	7 6	72.8	2 7
Cotton Cake, decorticated ..	10 0	35.0	5 8½	71.2	2 10	8 10	35.0	5 1	71.2	2 6
Cotton Cake, undecorticated ...	8 0	17.0	9 5	39.2	4 1	6 3	17.0	7 4	39.2	3 2
Earth Nut Cake, decorticated ..	10 2	41.0	4 11½	73.0	2 9½	8 7	41.0	4 2	73.0	2 4
Soya Bean Meal (extracted) ..	10 11½	38.0	5 9	64.0	3 5	8 9	38.0	4 7	64.0	2 9
Fish Meal (60% protein) ..	16 6	53.0	6 2½	58.9	5 7½	15 2	53.0	5 9	58.9	5 2
Meat and Bone Meal (40% protein)	10 7	36.2	5 10	44.0	4 10	9 5	36.2	5 2	44.0	4 3
Meat and Bone Meal (60%protein)	15 1	54.9	5 6	61.3	4 11	14 6	54.9	5 3	61.3	4 9
OTHER FEEDING STUFFS :										
Linseed, whole	16 6	19.0	17 4	119.2	2 9	15 4	19.0	16 0	119.2	2 7
Palm Nut Cake	8 10½	17.0	10 5½	70.2	2 6	7 10	17.0	9 3	70.2	2 3
Palm Nut Meal	8 11½	17.0	10 6½	78.0	2 3½	7 11	17.0	9 4	78.0	2 0
Potatoes	4 0	0.6	133 4	18.0	4 5½	4 2	0.6	138 11	18.0	4 8
Oat Straw	2 3½	0.9	50 11	20.0	2 3½	1 11	0.9	42 7	20.0	1 11
Meadow Hay	2 3	4.6	9 9½	37.0	1 2½	2 4	4.6	10 2	37.0	1 3

One of the objects of the foregoing table is to guide farmers in the economic purchase of feeding stuffs.

Ignoring their mineral content, the valuable constituents of any feeding stuff, whether home-grown or purchased, consist of:—

(1) Carbohydrates—a group of substances which include materials such as starch, sugar, etc. They supply heat or energy to the animal, and the surplus is stored by the animal as fat.

(2) Oil—which also provides heat or energy, the surplus being stored as fat. For this purpose oil is approximately 2½ times as valuable as the carbohydrates, but its presence in the ration in excessive quantities may lower the digestibility of the ration and cause digestive troubles.

(3) Protein—The group of bodies termed protein or albuminoids contain nitrogen. Protein is the only ingredient of a feeding stuff which can produce flesh or muscle, and hence its special importance.

All animals require a certain amount of each of the above constituents, but the relative amounts depend upon the class of stock. Thus, for example, a two-year-old fattening bullock requires a relatively small amount of protein (flesh forming material). Its ration should consist mainly of foods rich in carbohydrates, i.e., fat producing substances. On the other hand, a dairy cow is producing milk, which is a substance rich in protein, and as the protein, that is flesh forming material in milk, can only be derived from the protein in the food, the ration for the dairy cow must contain considerably more protein than that for the fattening bullock.

There are very wide differences in the composition of feeding stuffs, both home grown and purchased. Some, such as oats and maize, are rich in carbohydrates, and, therefore, particularly valuable for fattening purposes, whilst others, such as decorticated cotton cake, earthnut cake and linseed cake, are rich in protein, and are chiefly valuable for their flesh and milk-producing properties.

In the following table the composition of some of the more commonly used feeding stuffs is shown:—

PERCENTAGE COMPOSITION.

	Water.	Protein.	Oil.	Carbohydrates.
Turnips (Swedes)	88	1	0.2	9
Potatoes	75	2	0.1	21
Oat Straw	14	4	2	37
Meadow Hay	10	10	3	45
Pasture Grass	80	3.5	0.8	10
Cabbage	89	1.5	0.5	8
Fattening Foods :				
Oats	13	9	6	60
Maize Meal	12	10	4	70
Barley Meal	13	12	2	66
Flesh Forming Foods :				
Linseed Cake	11	30	10	35
Decorticated Cotton Cake	9	40	9	26

The farmer frequently asks what is the cheapest feeding stuff to buy. It is, however, often very difficult to give a direct answer. Much depends upon what the feeding stuff is required for, whether for fattening or milk production. Again, maize and oats are essentially fattening foods, whilst decorticated cotton cake is a flesh-forming food, and it would be just as futile to use the cost per ton to compare their values as it would be to use the cost per ton to compare the values of, say, sulphate of ammonia and superphosphate.

Foods of similar composition can, however, be compared, and it is possible for the enterprising farmer to effect considerable economies, not only in the use of home-grown feeding stuffs, but particularly in the purchase of concentrated feeding stuffs, by studying the market prices.

The starch equivalent figure is a measure of the energy, heat or fat producing value of the feeding stuff, and shows the number of pounds of starch which would be required to give the same heat or energy as 100 lb. of the feeding stuff. For example, the table on page 40 states that the starch equivalent of maize meal is 81½, or, in other words, 100 lb. of maize meal will provide as much heat or energy as 81½ lb. of pure starch.

The protein equivalent figure shows the number of pounds of digestible flesh or muscle producing material in 100 lb. of each of the feeding stuffs listed.

PRICES OF FERTILISERS.

The following table shows the ranges of retail cash prices of fertilisers per ton at 1st January, 1937.

		Cost of unit of fertilising ingredient at average of range of prices shown.		
Nitrogenous Manures	£ s. d. £ s. d.	Nitrogen.	Phos. Acid	Potash
Nitrate of Soda (15%N.)	7 10 0 to 8 10 0	10/8		
Sulphate of Ammonia (20.6%N.)	7 0 0 ,, 7 10 0	7/0½		
Nitro Chalk (15.5%N.)	7 10 0 ,, 8 0 0	10/0		
Phosphatic Manures				
Superphosphate (16% S.P.A.)	3 10 0 ,, 4 5 0		4/10	
Semsol (5% S.P.A. 15½% P.A.)	3 0 0 ,, 3 10 0		4/2¼	
Basic Slag (18% P.A.)	3 10 0 ,, 4 5 0		4/3¾	
Gafsa Mineral Phosphate (26% P.A.)	2 15 0 ,, 3 5 0		2/3¾	
Potash Manures				
Kainit (14% P.)	3 0 0 ,, 4 10 0			5/4½
Potash Salts (20% P.)	4 0 0 ,, 4 15 0			4/4½
Potash Salts (30% P.)	5 0 0 ,, 5 15 0			3/7
Muriate of Potash (50% P.)	8 0 0 ,, 10 0 0			3/7¼
Agricultural Salt	1 15 0 ,, 3 10 0			

Abbreviations:—N=Nitrogen. S.P.A.=Soluble Phosphoric Acid. P.A.=Phosphoric Acid. P.=Potash.

The cost of the unit of fertilising ingredient is determined by dividing the price per ton by the percentage of the ingredient contained in the manure, and this method of determining values is the only sound basis on which two grades of a manure which supplies the same fertilising ingredient can be compared. The price per ton is not a reliable guide as to which is the better value for money. For example, in the table of prices it is seen that the average of the range of prices for 14% Kainit is £3 15s. 0d. per ton, and for 30% Potash Salts £5 7s. 6d. per ton, and it might be concluded that the Kainit was the better value for money. This is not so. The 30% Potash Salts contains more than twice as much Potash as the Kainit, and is therefore a cheaper source of potash when the price is even double that at which the Kainit is offered. The cost of a unit of potash in the 30% Potash Salts is seen to be only 3/7, whereas the cost of a unit of potash in Kainit is 5/4¼. At the prices ruling for these manures, 30% Potash Salts is, therefore, better value for money than Kainit. Similarly, it is seen that at the prices prevailing Gafsa Mineral Phosphate is a cheaper source of Phosphoric Acid than Basic Slag, and that Sulphate of Ammonia is the cheapest source of Nitrogen.

In connection with the costs of the units of Phosphoric Acid as shown in the table on page 42, it should be noted that in the case of Superphosphate, the cost is that of a unit of Soluble Phosphoric Acid; whereas in the cases of Basic Slag, Semsol and Gafsa Mineral Phosphate, the figures represent the cost of a unit of insoluble Phosphoric Acid. It would not, therefore, be correct to compare the unit price of the phosphoric acid in Superphosphate with those of the phosphoric in the other three.

PRICES OF FAT STOCK.

The following were the average prices per live cwt. of bullocks and heifers, sold at Belfast Auction Marts, during each of the five weeks ended 29th December, 1936:—

Week ended.	Bullocks.		Heifers.	
	s.	d.	s.	d.
1st December ...	32	9	32	6
8th December ...	32	9	33	0
15th December ...	33	6	34	3
22nd December ...	32	6	32	9
29th December ...	33	9	33	6

PRICES OF LIVE STOCK.

Average Prices of Live Stock at Fairs during the month of December, 1936.

Date	Fair	Calves (under 9 months)	Store Cattle	Fat Cattle (18 months and over)	Springers		Milch Cows	Fat Lambs (under 12 months old)	Fat Sheep (over 2 years old)	Young Pigs
					Cows	Heifers				
		Per head £ s.	Per cwt. Live weight.	Per cwt. Live wgt.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.
1	Omagh	5 15	30/- to 32/6	30/-	16 0	15 0	15 5	*1 15	*1 10	—
2	Londonderry ...	—	27/- to 31/-	29/-	17 0	—	—	—	—	1 6
2	Rathfriland	4 6	24/- to 32/6	29/6	17 0	18 0	15 0	*1 10 †1 2/6	‡2 0 †1 5	1 6/3
3	Ballymoney	5 12/6	28/6 to 34/-	30/-	14 10	13 2/6	13 0	—	—	1 9
3	Strabane	3 10	26/- to 28/-	28/6	16 0	—	15 0	—	—	—
4	Moy	—	28/- to 32/6	30/-	15 17/6	13 2/6	15 17/6	*1 15	—	—
8	Irvinestown ...	5 19/9	30/- to 32/6	25/-	16 0	14 0	15 10	‡1 7/6	—	1 11
9	Crossgar	—	29/- to 31/-	—	17 10	—	16 0	—	—	1 15
10	Enniskillen ...	3 14	22/- to 27/-	30/-	16 10	13 0	14 10	—	—	1 7
11	Ballygawley ...	—	28/- to 35/6	30/-	15 10	—	14 0	*1 10	—	1 9/6
16	Lisnaskea	4 1/3	26/- to 31/-	30/6	15 0	14 10	14 10	—	—	1 10
17	Ballynahinch ...	—	30/- to 32/-	—	17 0	16 0	15 10	—	*1 13	1 15
19	Portadown	4 3/3	29/- to 33/-	31/-	16 0	14 0	15 0	—	—	1 12/6
21	Carnlough	4 5	22/- to 28/6	31/-	15 10	14 10	13 0	*1 12/6	*1 10	—
21	Moneymore ...	4 10/9	32/- to 35/6	30/-	16 0	14 5	14 0	—	*1 15	1 7/6
22	Fintona	4 15	32/- to 33/-	32/-	17 0	14 0	15 10	*1 12	*1 13	1 10
30	Killylea	—	28/- to 34/6	31/6	16 0	—	15 10	—	—	—
31	Antrim	—	28/6 to 32/-	30/6	21 0	18 0	—	—	—	1 10
Jany.										
1	Castlederg	3 10	31/- to 34/-	31/-	16 0	—	—	—	*1 12/6	1 7
2	Ballymena	6 9	24/- to 36/-	—	21 0	21 0	20 10	—	—	1 11

* Downs and Cross. ‡ Long Wools. † Mountain.

IMPORTS AND EXPORTS.

Table showing the Imports and Exports through Northern Ireland ports of certain Agricultural Products during the month ended 30th November, 1936, and the eleven months ended 30th November, 1936, with comparative figures for the corresponding periods in 1935.

(These figures are supplied through the courtesy of the Ministry of Commerce and are subject to revision).

COMMODITY	IMPORTS.				EXPORTS.			
	Month ended 30th November		Eleven months ended 30th November		Month ended 30th November		Eleven months ended 30th November	
	1936†	1935	1936†	1935	1936†	1935	1936†	1935
Bacon .. .. cwt.	1,190	2,605	16,670	29,347	39,759	41,925	369,402	230,542
Hams .. .. cwt.	670	737	9,006	8,713	14,649	13,098	133,782	118,713
Pork .. .. cwt.	—	—	69	8	4,891	3,736	36,887	35,831
Butter .. .. cwt.	7,445	10,759	120,676	121,072	260	601	6,454	6,112
Eggs .. .. gt. hds.	8,164	5,774	72,133	69,094	155,590	181,777	3,361,021	3,191,815
Oat Products (inc. Oatmeal) cwt.	1,503	3,234	26,145	20,849	8,639	11,071	69,881	81,345
Potatoes .. .. tons	—	—	279	155	*24,268	*25,694	*208,721	*143,872
Poultry .. .. cwt.	—	2	135	163	13,848	11,546	154,794	135,722
Grass Seeds .. cwt.	300	3,555	10,615	41,692	8,380	14,177	299,150	244,185

* These figures represent the quantities of potatoes inspected for shipment by the Ministry.

† These figures do not include direct trade with places abroad.

SHIPMENTS OF LIVE STOCK.

Statement showing the Shipments of Live Stock from Northern Ireland ports during the following periods:— Months of December, 1936; November, 1936; December, 1935. Twelve Months ended 31st December, 1936, and 31st December, 1935.

PORTS OF :—	CATTLE.						SHEEP.				PIGS.			Horses
	Fats.	Stores.	Milch Cows.	Springers.	Calves.	Total.	Fats.	Stores.	Lambs.	Total.	Fats.	Stores.	Total.	
Belfast	5,008	1,776	932	43	—	7,759	3,276	—	—	3,276	2,526	—	2,526	132
Larne	—	308	—	—	—	308	—	—	—	—	933	212	1,145	7
Londonderry ..	222	1,581	30	39	143	2,015	2,074	—	—	2,074	245	—	245	1
Newry	7	14	—	—	—	21	—	—	—	—	—	—	—	—
Total, December, 1936	5,237	3,679	962	82	143	10,103	5,350	—	—	5,350	3,704	212	3,916	140
Total, November, 1936	4,856	11,885	1,428	134	146	18,449	6,663	—	—	6,663	4,709	231	4,940	210
Total, December, 1935	7,489	8,548	1,179	77	1,114	18,407	8,354	—	—	8,354	6,714	3	6,717	198
Total, Twelve Months ended 31st Dec., 1936	73,676	162,670	16,614	2,217	12,982	268,159	50,839	535	109,587	160,961	46,123	1,263	47,386	4,796
Total, Twelve Months ended 31st Dec., 1935	79,261	203,410	18,206	3,088	18,374	322,339	73,240	6	92,259	165,505	82,111	2,512	84,623	5,157

Table showing the numbers of Live Stock (1) exposed for sale and (2) sold at 20 fairs in Northern Ireland during the months of December, 1935, and November and December, 1936.

Description of Live Stock.	December, 1935.		November, 1936.		December, 1936.	
	Number exposed for sale.	Number sold.	Number exposed for sale.	Number sold.	Number exposed for sale.	Number sold.
Store Cattle ...	6,543	4,517	8,557	5,872	5,264	3,752
Fat Cattle ...	948	860	1,460	1,300	1,396	1,248
Dairy Cattle ...	1,230	1,002	1,465	1,179	1,200	929
Sheep ...	298	183	447	314	320	264
Lambs ...	201	196	535	337	238	158
Young Pigs ...	2,747	2,259	3,337	2,390	3,093	2,553

Rough weather conditions and the Christmas holidays interfered with the supply of livestock at fairs during December, especially in the case of store cattle, which suffered a substantial decrease in number. Trade in this end generally was quieter than of late, but the best sorts were still in good demand. Large stores in forward condition for fattening were the best sellers and heifers for breeding purposes were also fairly well sought after. In some districts small stores were still being bought up by local graziers but thin rough animals were practically unsaleable. Fat cattle were little changed in supply last month. An improved trade for these continued and prices recorded a further advance towards the close of the month especially in the case of handy, lightweight animals of quality. Dairy stock were further reduced in supply but the demand remained keen for the best sorts. These were, however, limited in supply, and in the main prices had an easier tendency, particularly during the last two weeks. Sheep and lambs were offered in smaller numbers. Trade remained quiet but good fats sold well for local requirements.

Young pigs were still in good supply and with the demand continuing steady prices were firm on the month. The offerings of brood sows were again of poor quality and trade generally was dull at low levels, except in some instances where good quality animals were readily cashed at firm rates.

This report will be sent free monthly as issued on application being made to the Secretary, Ministry of Agriculture, Stormont, Belfast.

11th January, 1937.

Wt1304/2676. 3,500. 1/37. BL. G258.

ULSTER DAIRY SCHOOL, COOKSTOWN.

U. D. S.

USEFUL and practical courses of instruction in poultry-keeping, dairying and domestic science are provided for girls at this School.

DEFINITE advantages are derived from a course of training, whether the object is to return home or to take employment elsewhere.

SCHOOL fees are only £3 : 3 : 0 per term of 11 weeks, inclusive of board and residence.

Candidates for admission should obtain copies of the prospectus from the Ministry of Agriculture, Stormont, Belfast, and send in application forms without delay. Next term begins on 6th April, 1937.

MINISTRY OF AGRICULTURE.

List of Leaflets and other Publications.

LEAFLETS.

No. 1. Flax Seed, 1936.
" 2. Improvement of Farm Poultry.
" 3. Feeding for Egg Production.
" 4. Marketing of Eggs.
" 5. The Dishorning of Calves.
" 6. The Packing of Apples in Standard Boxes.
" 7. Potato Trials.
" 8. Seed Testing for Farmers.
" 9. The Renovation of Orchards.
" 10. Fruit Tree Pests—Capsid Bugs.
" 11. Fruit Tree Pests—Aphides and Apple Sucker.
" 12. Fruit Tree Pests—Caterpillars
" 13 Contagious Abortion in Cattle.
" 14. Cheese-making on the Farm.
" 15. Suitable Varieties of Fruit.
" 16. The Feeding of Dairy Cows.
" 17. Home Bottling of Fruits and Vegetables.
" 18. Marketing of Dead Poultry.
" 19. How to Feed Linseed.
" 20. The Hatching and Rearing of Chickens.
" 21. The Uses and Advantages of Portable Poultry Houses.
" 22. Leather-Jacket Grubs.
" 23. The Handling and Care of Wool.
" 24. Fluke in Sheep.
" 25. The Rearing and Management of Young Horses.
" 26. Ordnance Survey Maps for Farmers.
" 27. How to Keep Eggs Clean
" 28. The Construction of a Laying House for Poultry.
" 29. The Selection and Breeding of Laying Hens.
" 31. Coccidiosis in Poultry.
" 32. Roup of Poultry (Fowl Pox).
" 33. Spraying Calendar for Apple Orchards.
" 34. The Pruning of Apple Trees.
" 35 The Fattening of Pigs.
" 36. Advantages of Milk Recording.
" 37. The Raising and Fattening of Turkeys.
" 38. The Destruction of Charlock.
" 39. The Production of Clean Milk.
" 40. The Laying Down and Management of Temporary Pastures.
" 41. Blackleg, Blackquarter or Quarterill.
" 42. The Purchase of Balanced Rations for Dairy Cows.
" 43. Tuberculosis in Poultry.
No. 44. Results of Crop Experiments, 1935.
" 45. The Breeding and Rearing of Pigs.
" 46. Hints for Winter Egg Production.
" 47. The Care and Management of Sheep.
" 49. American Gooseberry Mildew.
" 50. Potato Blight.
" 51. Butter-making on the Farm.
" 52. Gapes in Chickens.
" 54. The Breeding and Rearing of Calves.
" 55. Destruction of Ragwort or Benweed.
" 56 Identification of Egg Supplies.
" 57. How to have Eggs of First Quality.
" 58. How the Fertilisers and Feeding Stuffs Act benefits the Farmer.
" 59. Bacillary White Diarrhoea (Pullorum Disease).
" 60. Advantages of Winter Agricultural Classes.
" 61. The Care and Management of Breeding Bulls.
" 62. The Production of Timber on the Farm.
" 63. Sheep—Castration, Docking, Foot-Rot and Care of Feet.
" 64 The Destruction of Warble Fly Maggots in Cattle.
" 65. The Packing of Apples in Barrels
" 66. Seed Testing Facilities for Traders.
" 67. The Cultivation of Vegetables.
" 68. The Cultivation of Strawberries.
" 69. The Construction of Piggeries.
" 70. Ringworm.
" 71. The Cultivation of Raspberries.
" 72. Tree Planting for Shelter and Ornament.
" 73. The Propagation and Maintenance of Healthy Stocks of Potatoes.
" 74. New Pure Strains of Flax.
" 75. Pig Production and the Pigs Marketing Scheme.
" 76. Acarine (Isle of Wight) Disease of Bees.
" 77. Licensing of Milk Producers and Distributors.
" 78. Graded Milk.
" 79. The Picking and Storing of Apples.
" 80. Hoose or Husk in Farm Stock.
" 81. The Construction of Cow Houses.
" 82 White Scour in Calves.
" 83. The Care, Management and Feeding of the Poultry Breeding Stock.

Any of the above leaflets may be obtained free of charge and post free on application to the Secretary, Ministry of Agriculture, Stormont, Belfast.

CIRCULARS.

No. 1. Phosphatic Fertilisers.
" 5. Why Pay a Tax on the Horns of Cattle ?
" 8. Basic Slag.
" 9. Smut in Oats.
" 10. Purchase of Fertilisers and Feeding Stuffs.
" 11. Fertilisers and Feeding Stuffs Act—General Summary.
" 12. The Treatment of Liver Fluke.
" 13. The ox-Warble Fly.
" 306. Fertilisers and Feeding Stuffs Act, 1926—Revision of Regulations.

MISCELLANEOUS PUBLICATIONS.

Store Cattle.
Reports on Egg-Laying Tests.
Crop Insurance.
List of Growers of Certified Crops of Immune Varieties of Potatoes.
List of Growers of Certified Crops of Non-Immune Varieties of Potatoes.
The Ministry's Monthly Report.
Register of Premium Stallions.
Guide to the Live Stock Breeding Act (Northern Ireland), 1922.
Guide to the Marketing of Fruit Act (Northern Ireland), 1932.

Any of the above publications may be obtained free of charge and post free on application to the Secretary, Ministry of Agriculture, Stormont, Belfast.

The following publications can be obtained from His Majesty's Stationery Office, 80 Chichester Street, Belfast, at the prices stated :—

(1) The Annual Report of the Ministry of Agriculture for Northern Ireland. Price 2/6 net.
(2) Annual Report upon the Agricultural Statistics of Northern Ireland. Price 2/- net.
(3) The Journal of the Ministry of Agriculture for Northern Ireland. Price 2/6 net.
(4) The Agricultural Output of Northern Ireland, 1925. Price 2/6 net.